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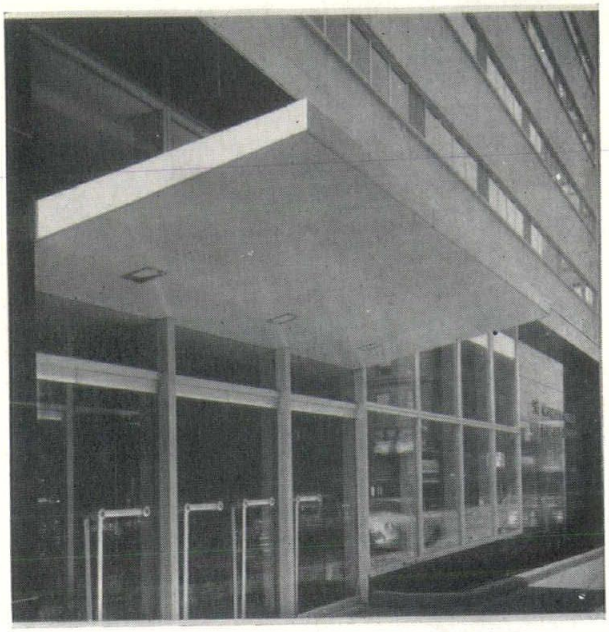
JANUARY-FEBRUARY, 1956
VOLUME XX
NUMBER ONE

.....appearance has influence

- KAWNEER PRODUCTS
- WELDWOOD DOORS
- HOLLOW METAL DOORS
- HOLLOW METAL FRAMES
- METAL WINDOWS
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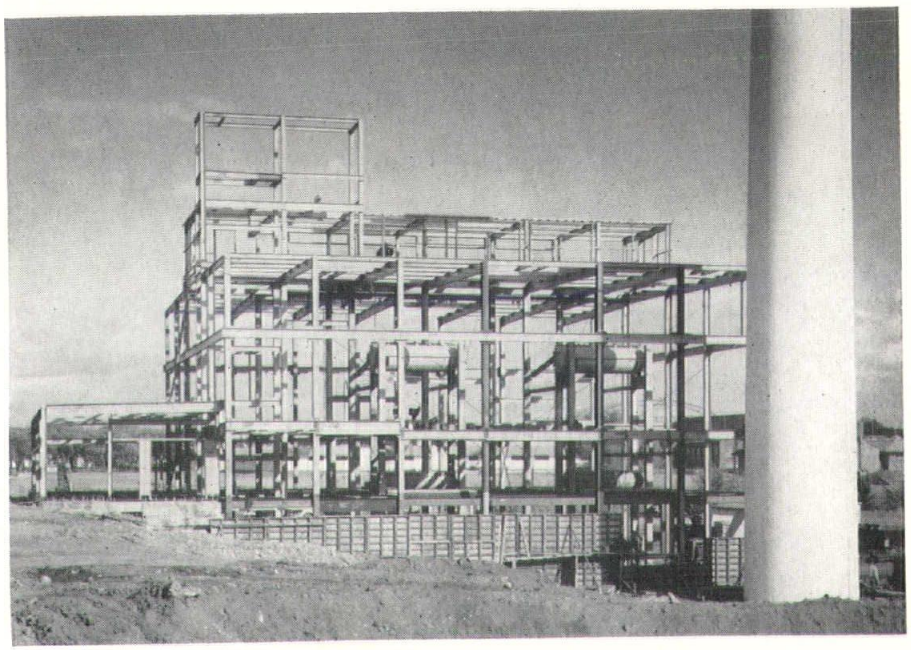


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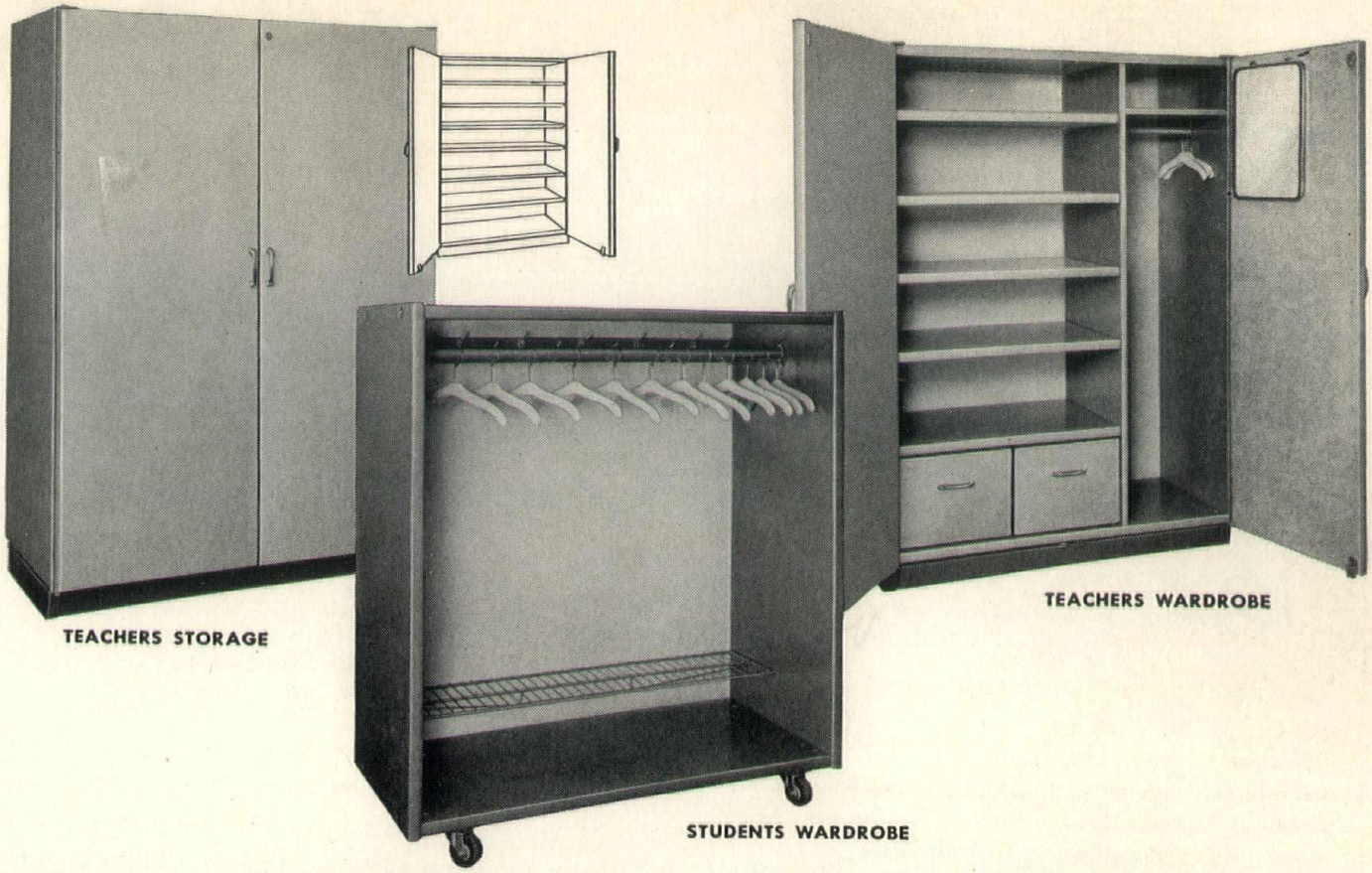
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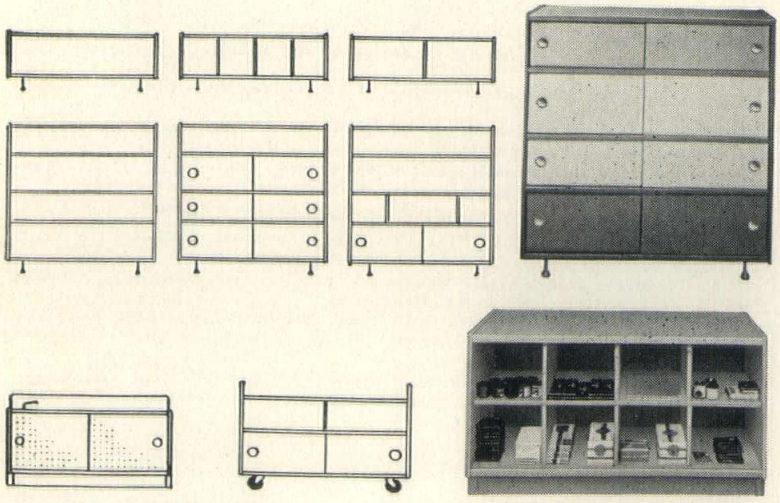
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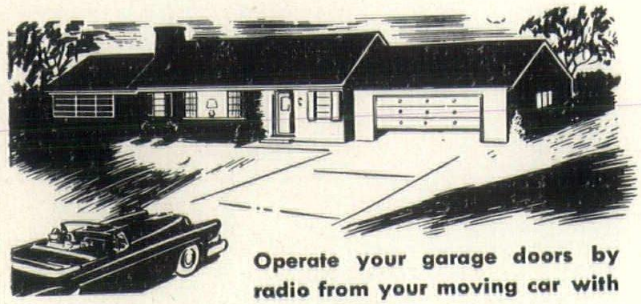
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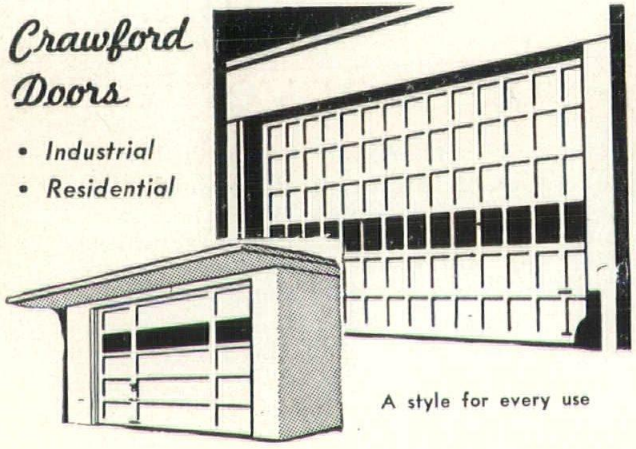
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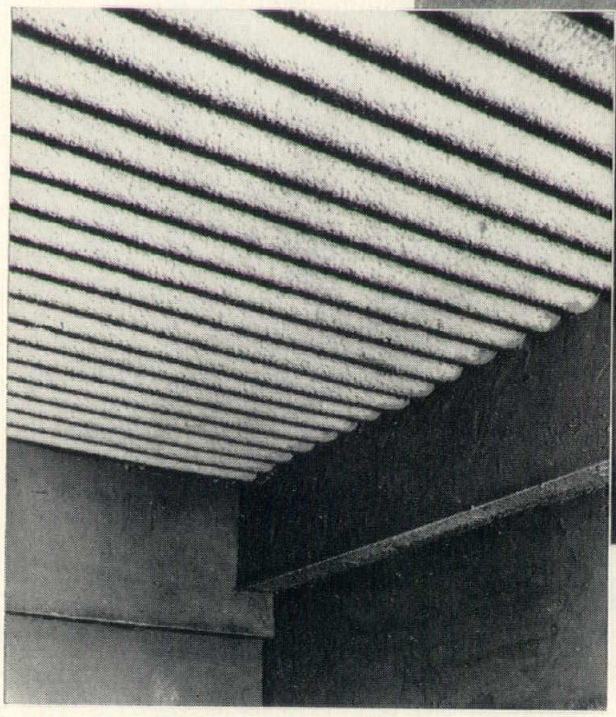
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VOLUME XX
NUMBER 1
1956

Gunning ZONOLITE ACOUSTIC Directly To Underside Of Metal Floor For Fireproofing!





Four Hour Rating by Underwriter's Laboratories on This Low-Cost Fireproofing!

A reinforced concrete floor applied over corrugated metal deck to the underside of which a layer of Zonolite Acoustical Plastic was machine applied recently achieved a four hour fire rating at Underwriter's Laboratories. Zonolite was applied to thickness of 1/2" below depth of corrugation and thickness of 2 1/4" on beams.

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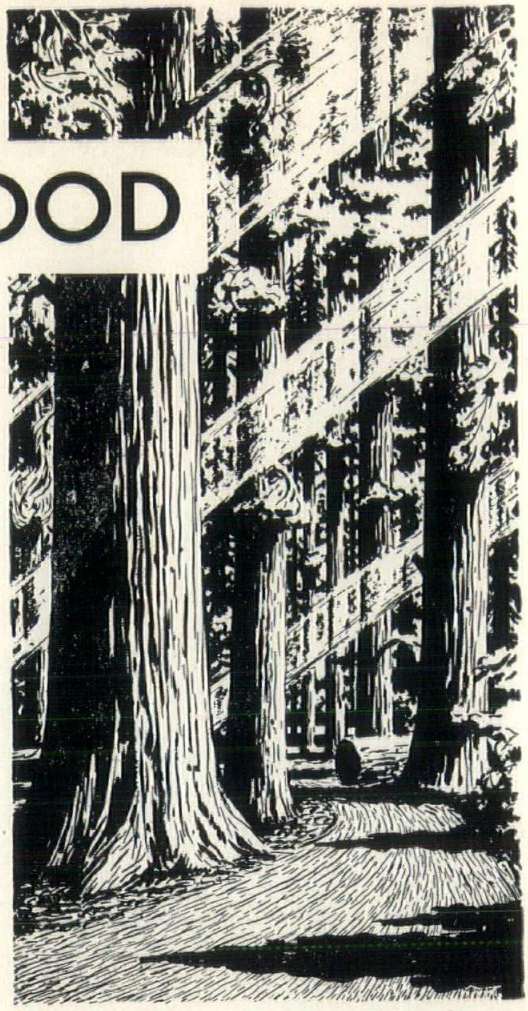
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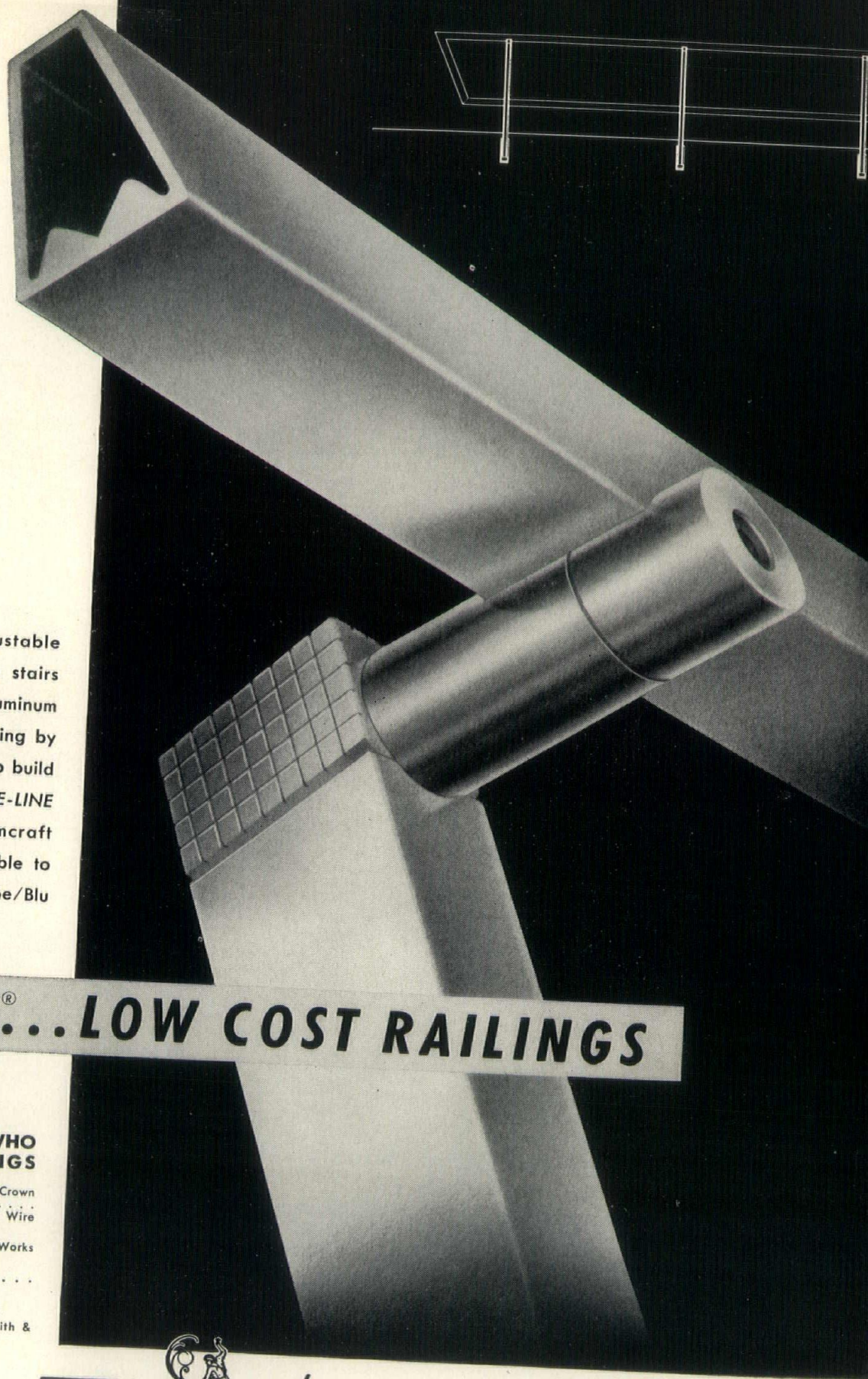
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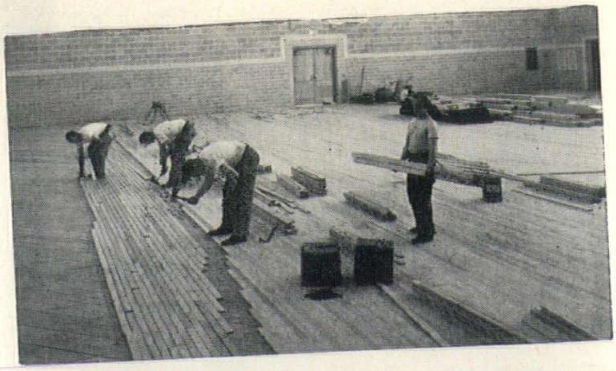
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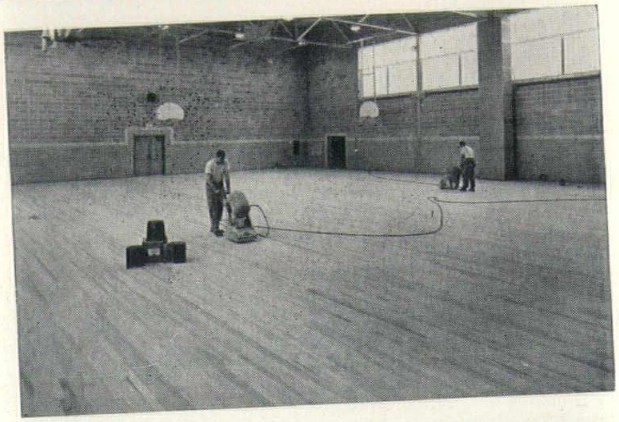
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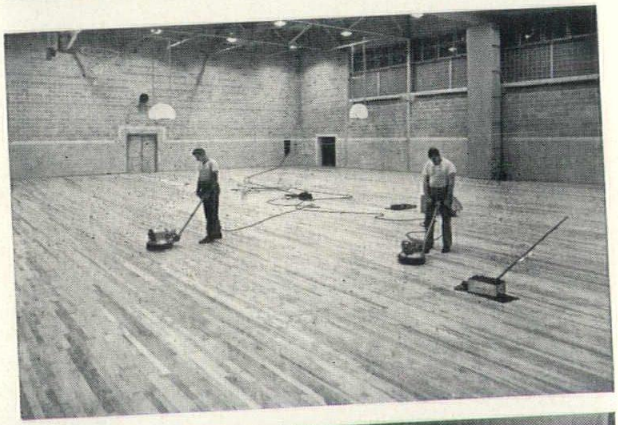
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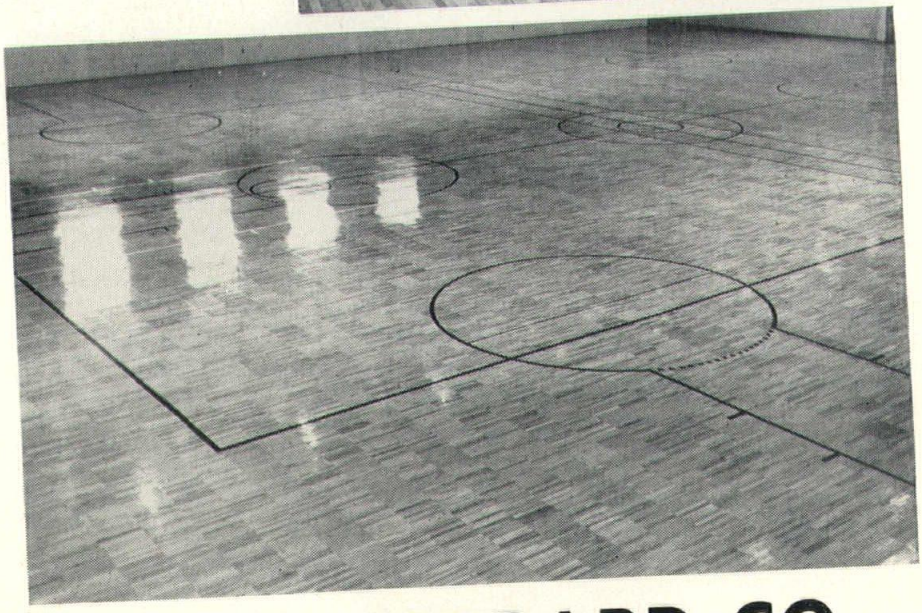




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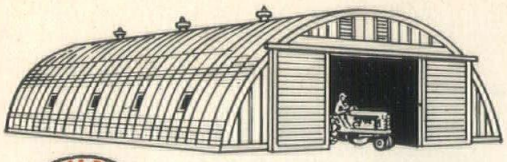
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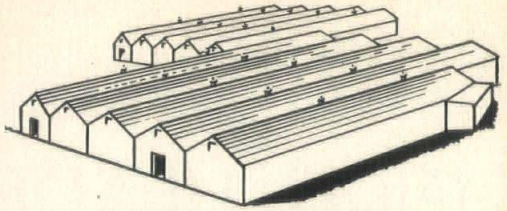
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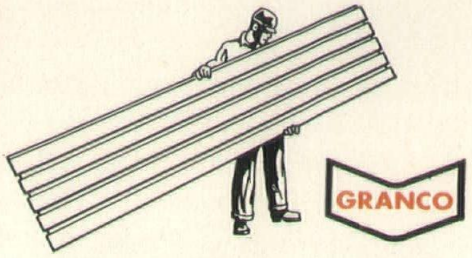
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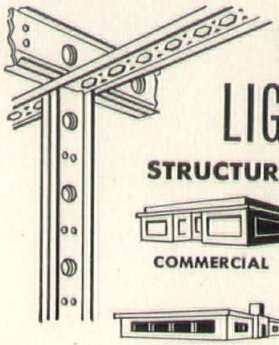


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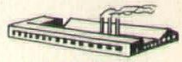
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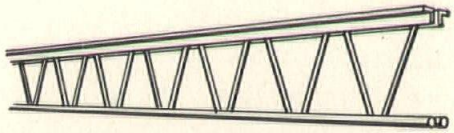


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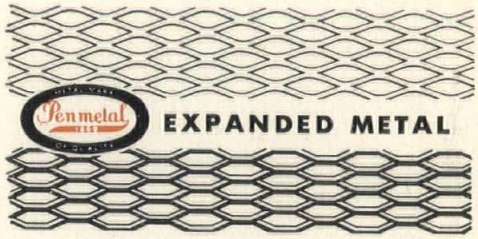
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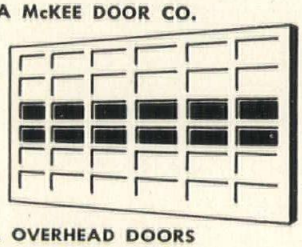


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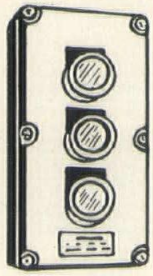


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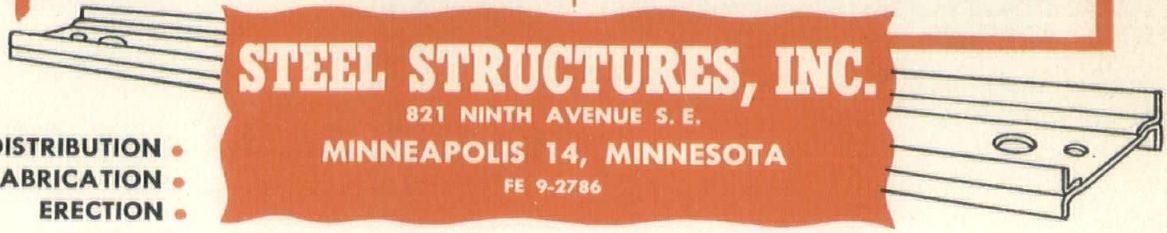
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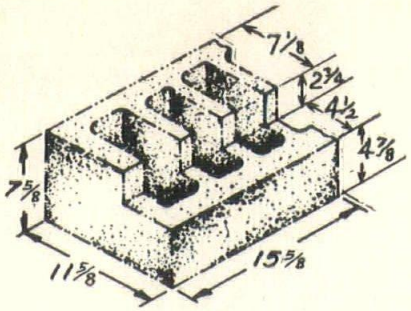
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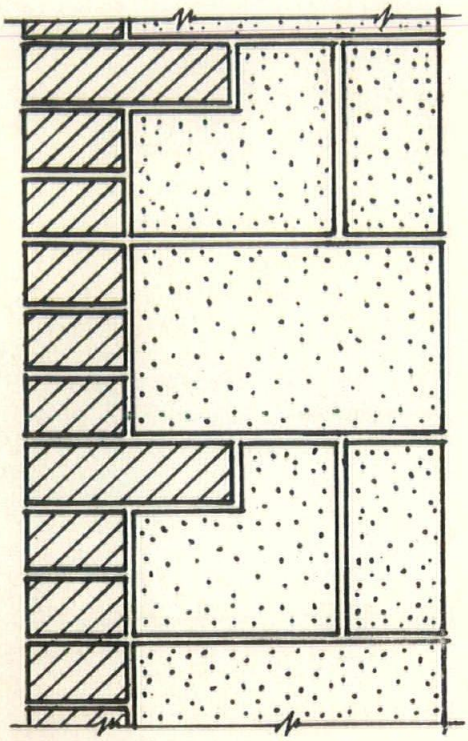
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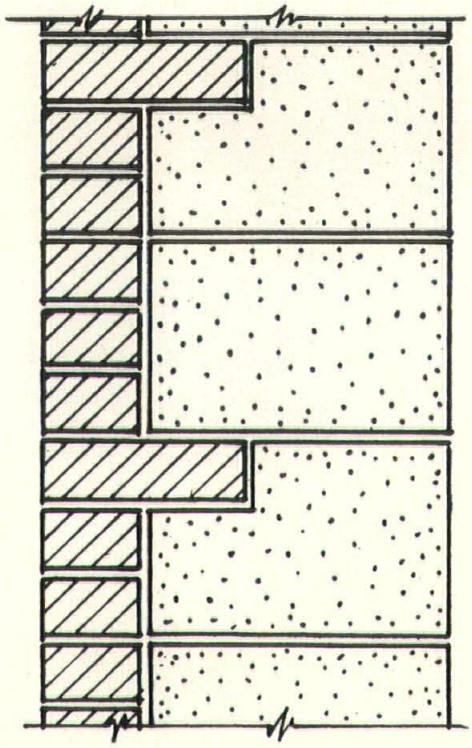




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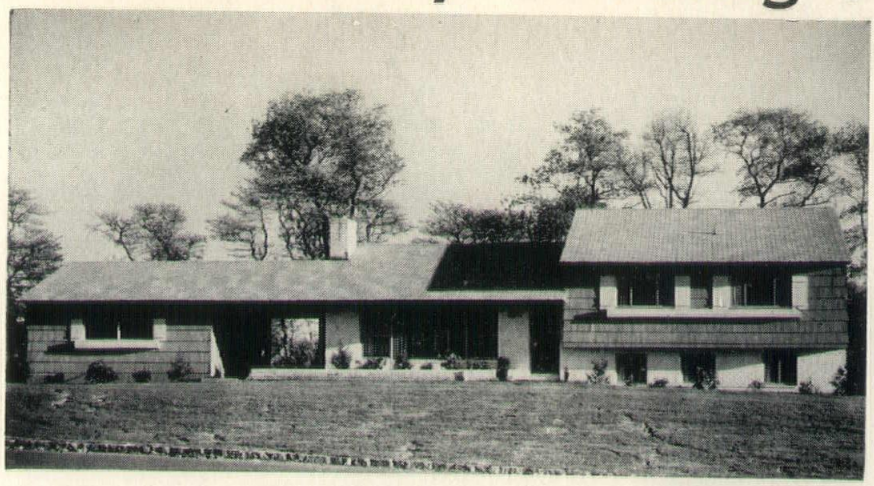
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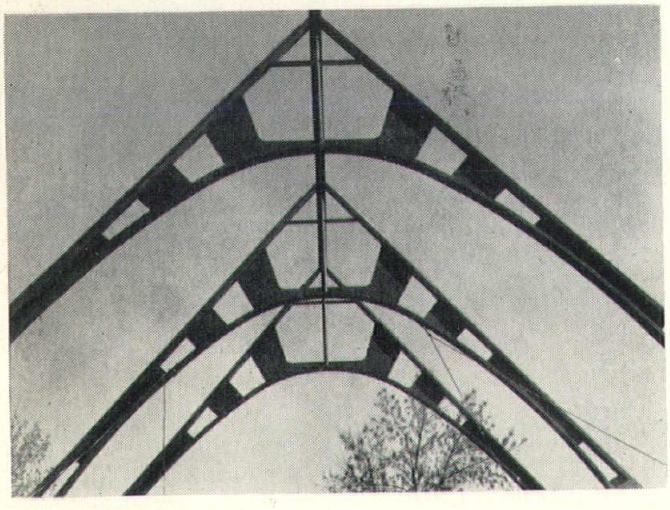
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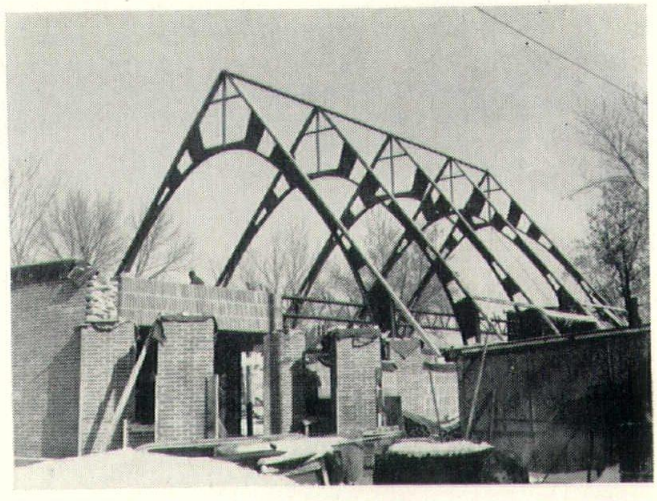
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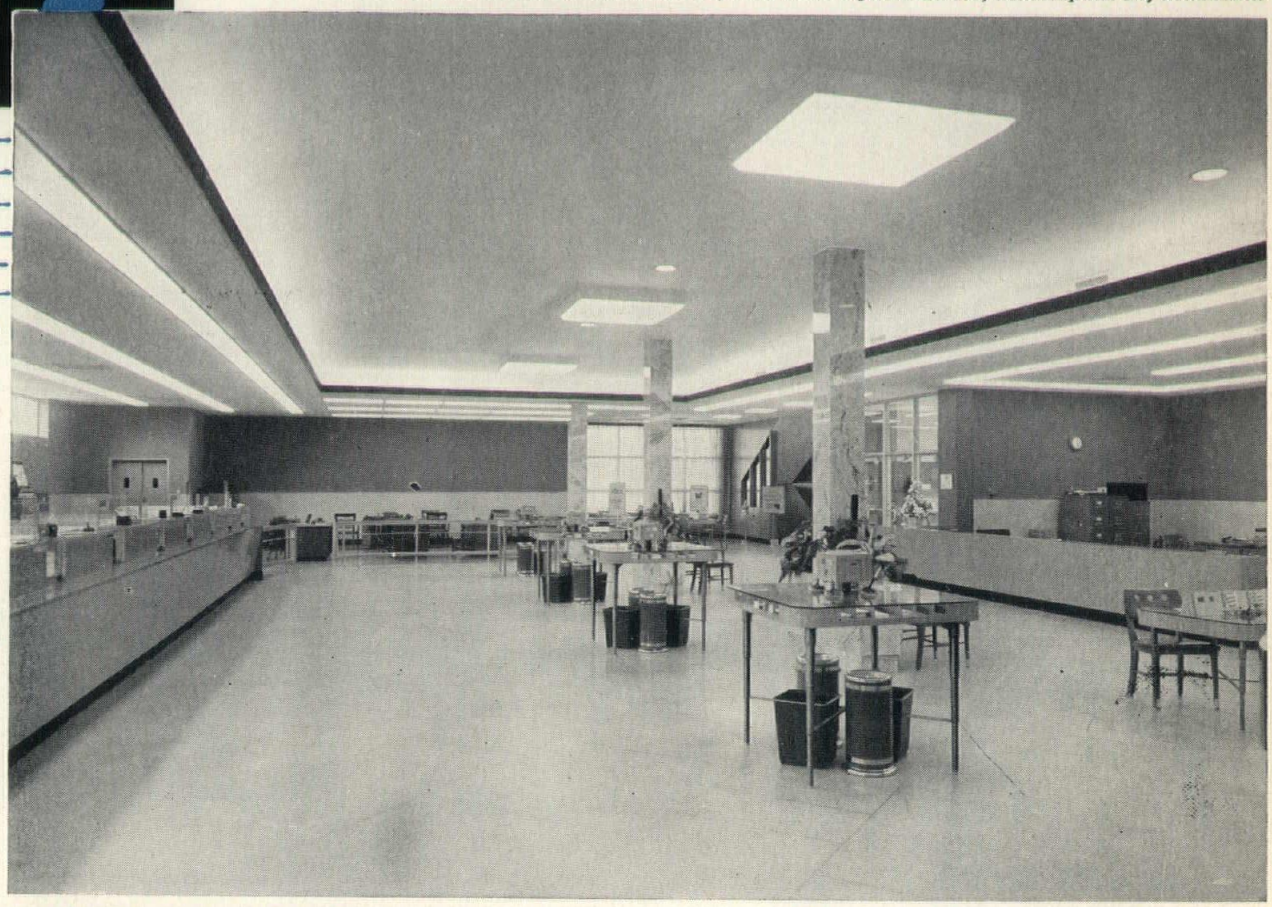
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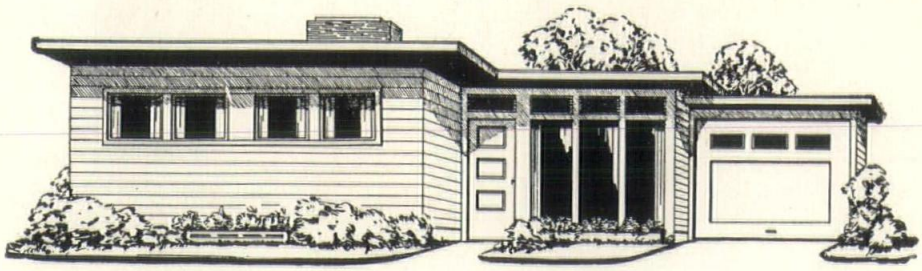
Information compiled by

NORTHERN STATES NSP POWER COMPANY

For factual lighting information, technical data on light sources, fixtures, relative costs, etc.

Call Commercial Sales Department—Northern States Power Company

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AIR CONDITIONING by
CHRYSLER AIRTEMP



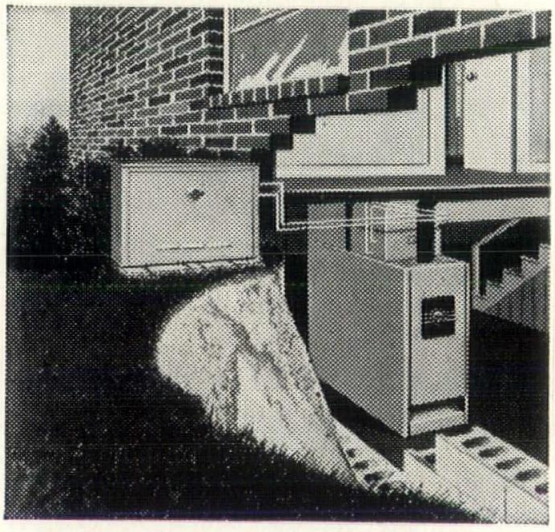
FOR MODERN HOMES!

New Airtemp DIVISION OF CHRYSLER **system makes AIR CONDITIONING practical for any home—anywhere!**

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Chrysler Airtemp's new inverted "V" type cooling coil can be mounted on *top* of an Airtemp furnace to give 2/3 of a complete year-round air conditioning system. Waterless, or water cooled, condensing unit located in crawl space, attic, garage, or outside, completes the Space-Saver combination. Uses no living area floor space.

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This report . . . completed by an Independent Testing Laboratory speaks for itself and says that there is NO BETTER BRICK THAN HEBRON BRICK for quality, compression, strength, low absorption and service.

COPIES OF THE ORIGINAL TESTS ARE AVAILABLE FOR EXAMINATION AND WILL BE FURNISHED UPON REQUEST.

LABORATORY NO. 120891

TYPE: No. 60R

VISUAL INSPECTION: Uniform in size and shape

DIMENSIONS:

Number	*Length*	*Width*	*Thickness*
1	7.97"	3.75"	2.24"
2	8.00	3.75	2.26
3	8.00	3.75	2.23
4	8.00	3.78	2.22
5	7.97	3.75	2.23

COMPRESSION:

Number	*Compressive Strength*
1	10,500 lbs.in^2
2	10,400
3	12,100
4	10,250
5	10,100
Avg.	10,670 lbs.in^2

ABSORPTION:

Number	*24 Hour Absorption*	*5 Hour Boiling Absorption*	*C/B Ratio*
1	6.0%	8.4%	0.72
2	7.6	9.8	0.78
3	6.2	8.4	0.74
4	7.5	9.6	0.78
5	6.3	8.8	0.72
Average	6.7%	9.0%	0.75

SPECIFICATION

ASTM C62-50

Grade SW

Individual Units	Average of 5 Units
Over 2500 lbs. in^2	Over 3000 lbs. in^2

5 Hour Boil	
Under 20.0%	17.0%

Saturation Coefficient	
Under 0.80	Under 0.78

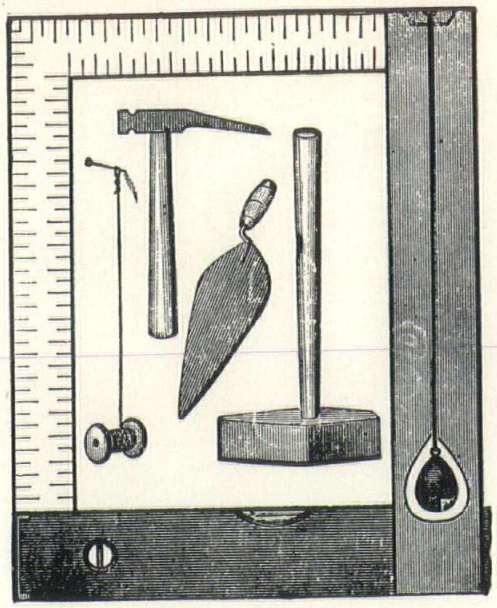
REMARKS: These brick meet ASTM Specifications C 62-50 for Grade SW Clay Building Brick. Samples were submitted and received at the laboratory on October 20, 1955.

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HEBRON, North Dakota

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When problems arise or information is desired consult the following secretaries in Minnesota.

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Archie Foster
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1009 Mill Avenue

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fence and iron

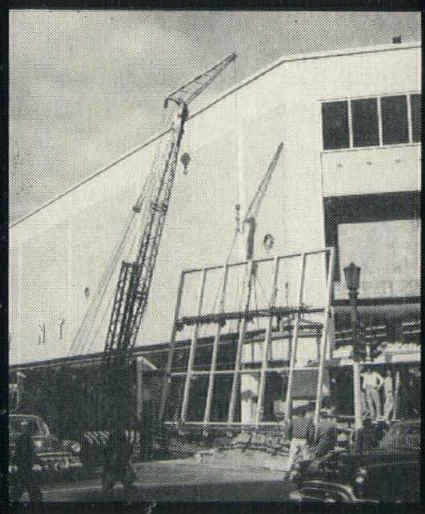


. . . . . Practical, modern beauty and adaptability - these are the features which Minnesota Fence and Iron Works are entrusted to create for architectural designers in meeting varied specifications. Grant's dazzling new home in downtown St. Paul is an outstanding example of this.

Sturdy steel pan stairs and fine metal railings of Minnesota Fence craftsmen are a constant compliment at the 32 foot wide mezzanine stair entrance. The beautiful staircase between the downstairs store further demonstrates their adaptability in meeting varied level problems with ease of installation and economy of cost.

Minnesota Fence and Iron is proud to have been a part of Grant's confidence and to have participated in this million dollar St. Paul structure. We pay tribute to others who participated in the erection of this fine example of modern architectural design and construction.

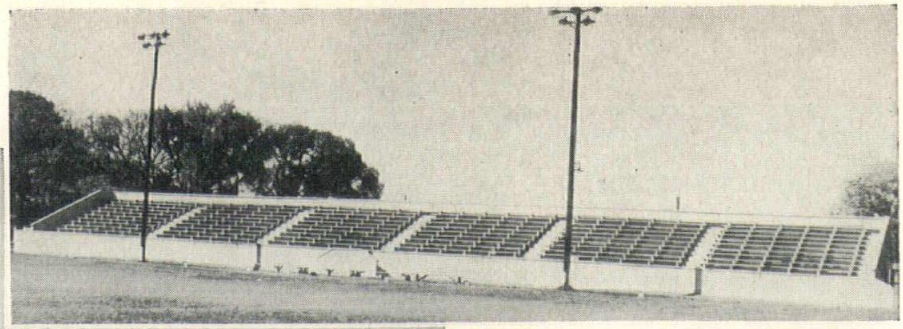


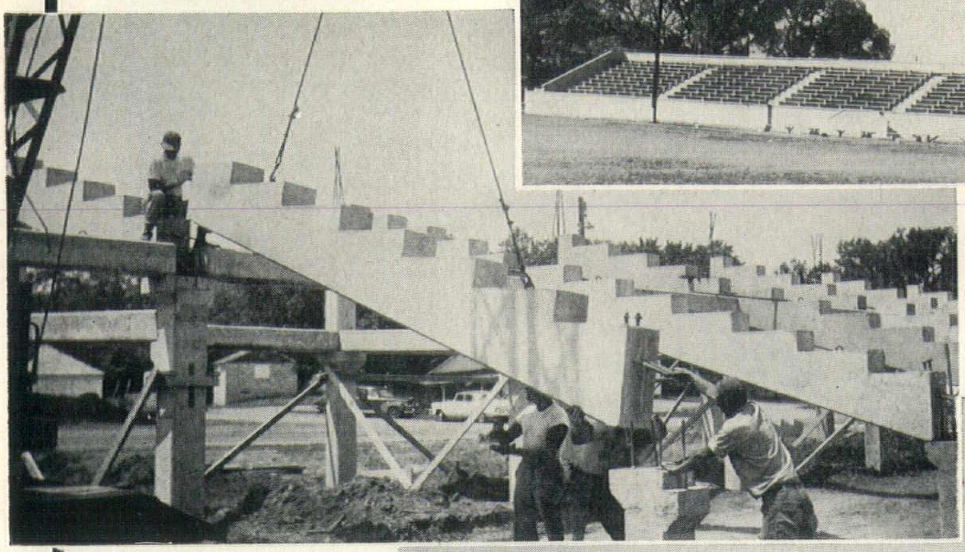




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240 UNIVERSITY AVENUE
ST. PAUL 3, MINNESOTA
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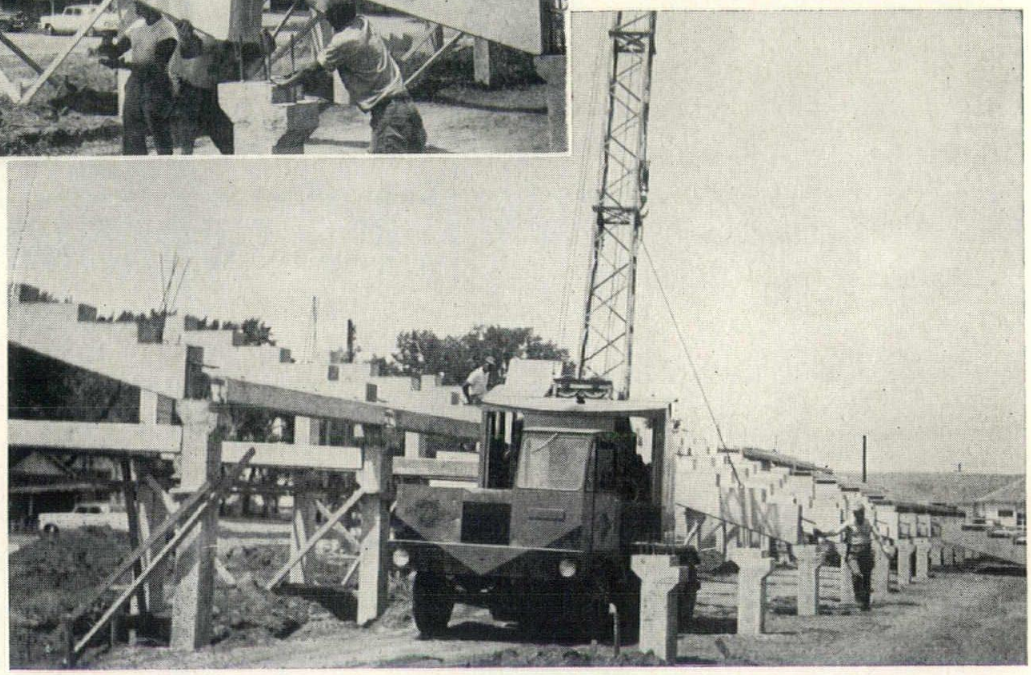
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GRANDSTAND CONSTRUCTION



Erection Photos of

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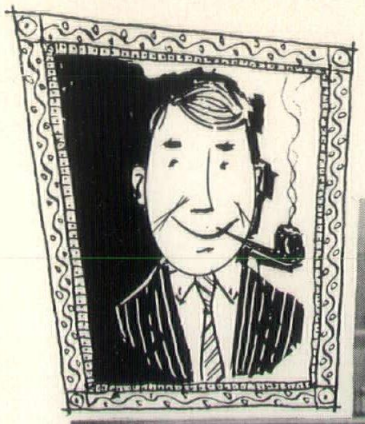
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A portrait of a happy home owner . . .



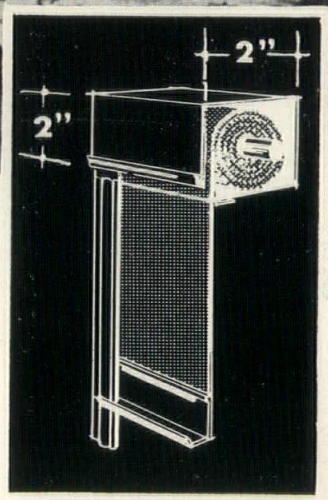
Protected By *Pella*

FIREPLACE ROLSCREEN

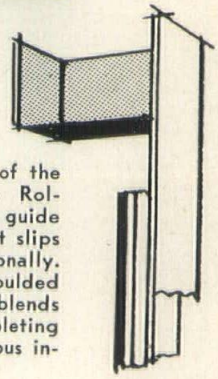
Picture yourself as the contented looking gentleman above dreaming by the fire. Enjoying the crackling, sputtering flames and knowing you are free from worry. Pipe dreams? Not at all. With Pella's thin mesh design even the smallest spark is prevented from flying into the room. Your home and loved ones are protected from the catastrophe of fire. This safety feature (coupled with added protection from insects and animals that may find their way down the chimney in the summer) offers you trouble-free operation and a chance to relax and enjoy your fire.

No other screen can offer you all these advantages:

- Narrow friction angles firmly attached to masonry produces a rigid inconspicuous frame.
- If your hearth is above floor level, it is impossible to place an ordinary screen around it. Pella Fireplace Rolscreen fits ideally into this situation because it has no exterior frame.
- To fit your decorating scheme, Pella Rolscreen is available in your choice of black, gray, or bronze with widths to 4'0".
- Only Pella offers Rolscreen—the screen that rolls up and down. When down the screen latches firmly in place, preventing its being opened by small children.
- All these advantages make Pella Fireplace Rolscreens sound expensive: but its most gratifying advantage is that it is well within the budget of every fireplace owner—30x28" screen installed locally—$35.



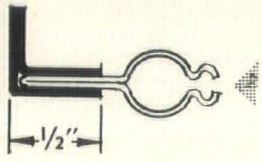
Cross-Section



Friction Angle

The cap at the top of the angle supports the Rolscreen housing. The guide as illustrated at right slips into the angle frictionally. The attractive moulded face of the guide blends with fireplace completing an almost inconspicuous installation.



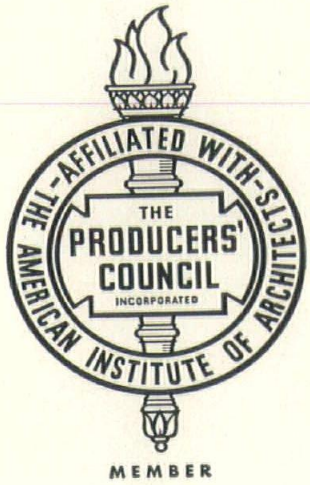


Actual Size

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and their
Associates
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PRODUCERS'
COUNCIL
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of Quality Building Products and Modular Application

Calhoun Beach Club, Minneapolis

Thursday, April 12, 5 p.m.



recent work of HILLS, GILBERTSON and HAYES

A. A. FISHER, associate

AIA

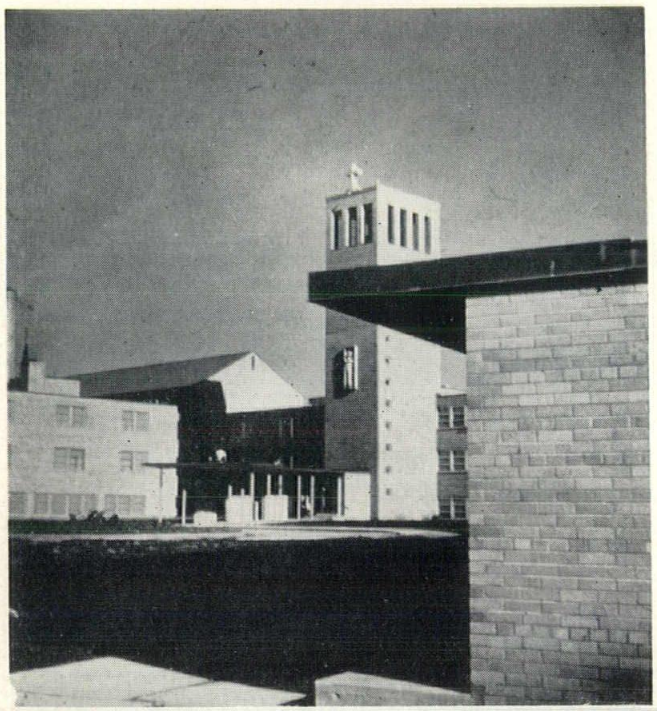
THE offices of Hills, Gilbertson and Hayes, and A. A. Fisher, Associate, are located at 6009 Wayzata Boulevard. The present firm was organized in 1940 and, as the background experience of all of the principals was mainly institutional and ecclesiastical in character, it seemed but natural that they should specialize in these two fields of endeavor. Hospitals, schools, convents and other parish buildings as well as churches of practically every denomination have kept this firm busy with their varied planning problems.

In the drafting room, under the direct guidance of Mr. Fisher, are James Bofferding, Glenn Cording, John Anderson, John Wiste, George Normandin, Harold Andrews, Clarence Harkins, Maurice Johnson and Edward Lofstrom. While certain ones have their special duties in which they are more interested, such as interior design, specifications, tough problems of detailing, model making, etc., each man has his opportunities to exercise, in varying degrees, his own personal ideas so that each may round out his practical experience in whatever direction may appeal to him.

The one-word architectural philosophy of the firm—if a creed can be reduced to a single term—would be TIMELESSNESS. Since professional duty to the client compels the protection of his investment, each new idea, material or design is mentally pretested by the firm's personnel to assure continuance of all aspects of excellence in their buildings.

MOTHER HOUSE, NOVITIATE, HIGH SCHOOL and JUNIOR COLLEGE

For the Sisters of the Presentation of the B.V.M. in Aberdeen, S. D.



STRUCTURE: Reinforced concrete with exception of superstructure of chapel wing which is steel frame. Masonry walls, brick faced, interior partitions of light weight block painted, terrazzo floors, aluminum sash.

DESCRIPTION: The approach to the building is up a gentle slope from the south into a U-shaped court. To the west is the convent and to the east is the boarders' wing and straight ahead are about 180 feet of administration wing accented by the entrance tower. Extending left from the administration is the chapel wing, differentiated from the surrounding structure by its tiled, gabled roof. To the north and hidden from the court is the four storied novitiate wing.

The central three-storied administration portion is the hub of the institution. All food and general supplies are delivered at the west rear to a central receiving department. Here also, on the first floor, is the main kitchen where food is stored, prepared and served to the dining rooms in the convent, the novitiate and the large school cafeteria. Administrative offices, parlors, guest rooms and studios occupy the second floor. The third floor east is accurately an extention of the boarders' facilities although some space has been given over to temporary classrooms until the proposed school building is built.

The boarders' wing, angling to the southeast from the administration wing, is more than 200 feet in length and also three-storied. Here the second and third floors are given over to private rooms and dormitories. However, for the present the second floor is being used for temporary classrooms. The first floor is devoted to classrooms and student activities.

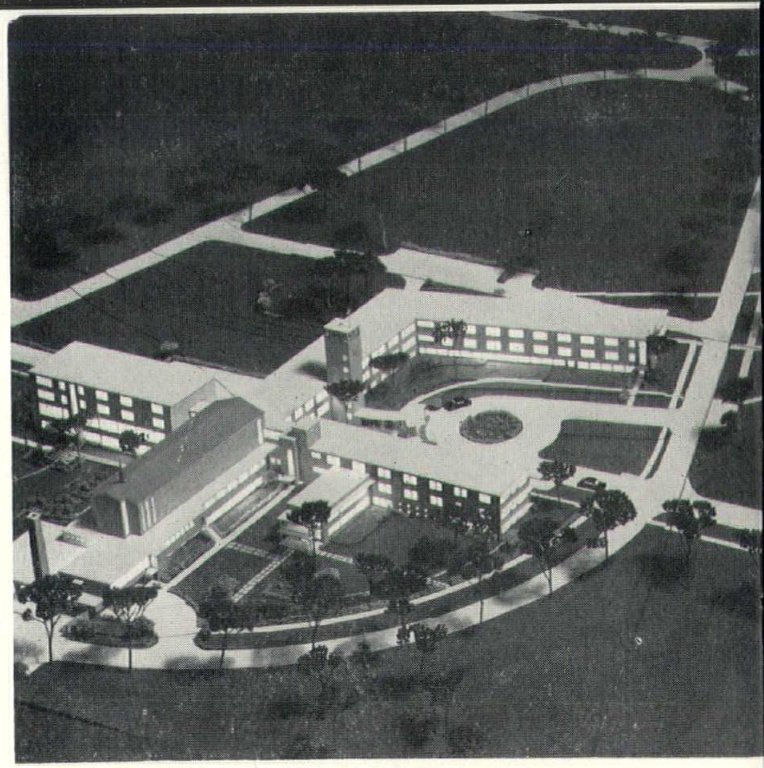
STRUCTURAL ENGINEERS: Schuett-Meier, St. Paul, Minn.

MECHANICAL & ELECTRICAL ENGINEERS: Gausman & Moore, St. Paul, Minn.

GENERAL CONTRACTOR: Madsen Construction Co., Minneapolis, Minn.

HEATING & PLUMBING: Healy Plumbing & Heating Co., St. Paul, Minn.

ELECTRICAL CONTRACTOR: Central Electric Co., Fargo, N. D.



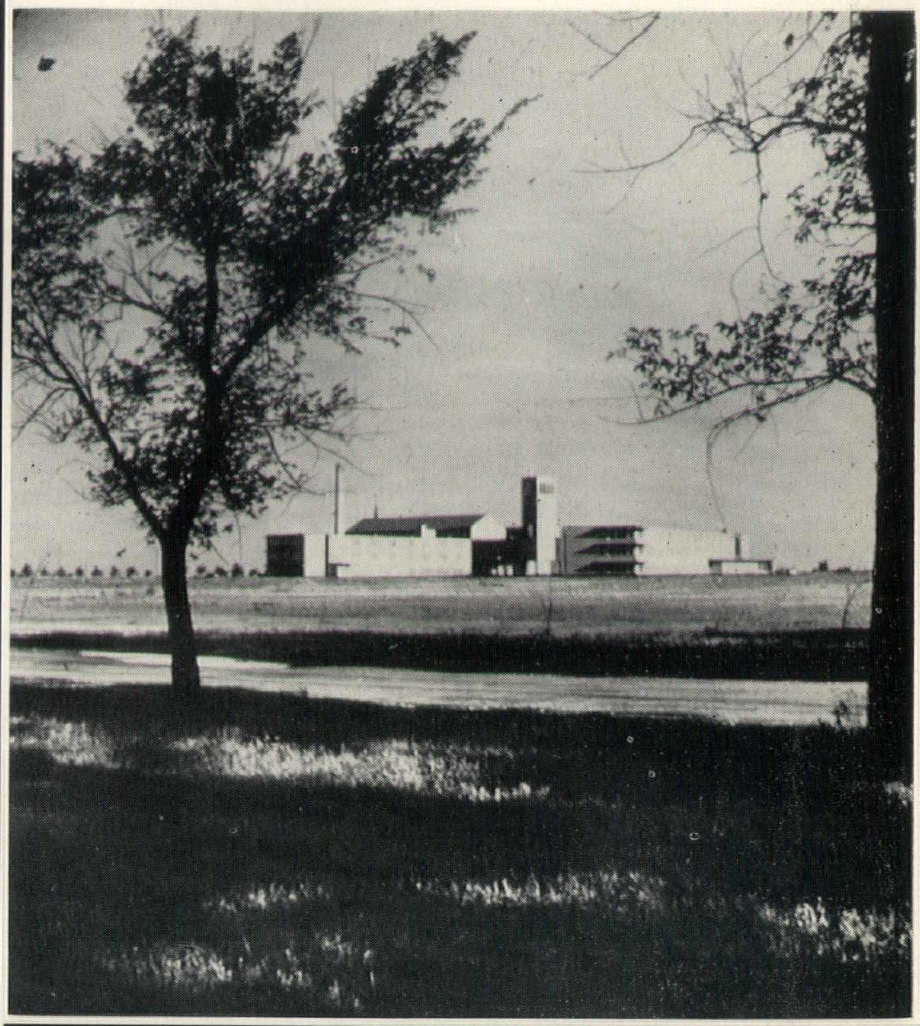
The convent, a three-storied building some 160 feet in length, provides on its second and third floor separate cells for the fifty sisters who make up the permanent residents. A smaller two-story wing extending to the west provides the sisters with a dining room on the first floor and community room on the second. Other facilities on the first and second floors include serving, typing and library rooms, luggage storage, general storage, offices, a serving kitchen and guest dining room.

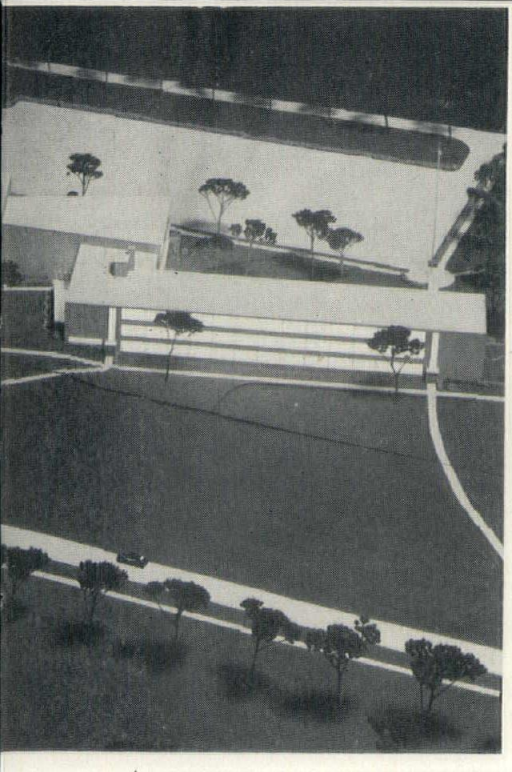
The novitiate wing extends north about 120 feet. Its two lower floors provide laundry facilities, dining room, serving kitchen, classrooms, music rooms, general storage, luggage storage and community room. The upper two floors house 75 novices in individual cells arranged around a central core of toilet, bath and storage facilities, leaving outer walls unobstructed for splendid lighting and ventilation of sleeping rooms.

The main chapel is accessible by all groups, sisters, novices, students or visitors and any group can enter without crossing the traffic path of another. The chapel wing includes, besides the chapel itself, an auditorium on the first floor under the chapel, quarters for the resident chaplain and visiting clergy, garages, laundry, storage spaces, chaplains' dining room and serving kitchen and the heating plant.

BELOW:

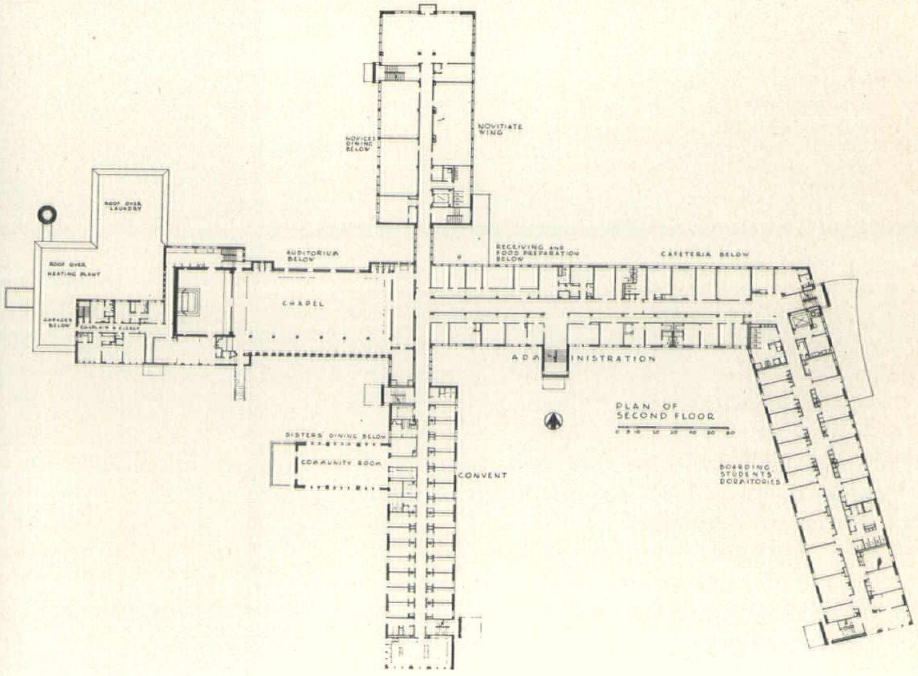
VIEW OF COMPLETED MOTHERHOUSE, DORMITORY





ARCHITECT

PLAN





ST. JOSEPH'S HOSPITAL

FOR THE SISTERS OF THE SORROWFUL MOTHER

in Mankato, Minn.



STRUCTURAL ENGINEERS: Schuett Miere, St. Paul, Minn.

MECHANICAL & ELECTRICAL ENGINEERS: G. M. Orr Engineering, Minneapolis, Minn.

GENERAL CONTRACTOR: Hutter Construction Co., Fond du lac, Wis.

HEATING & PLUMBING CONTRACTOR: Cuddy Plumbing & Heating Co., Mankato, Minn

ELECTRICAL CONTRACTOR: Howard C. Draper, Mankato, Minn.

THE hospital is a reinforced concrete masonry building made up of four five-story wings, plus basement, radiating from a central service core with kitchen and chapel in a separate, smaller wing. The laundry facilities and heating plant are housed in a separate building isolated from the main building but connected by a level tunnel to the basement of the main building.

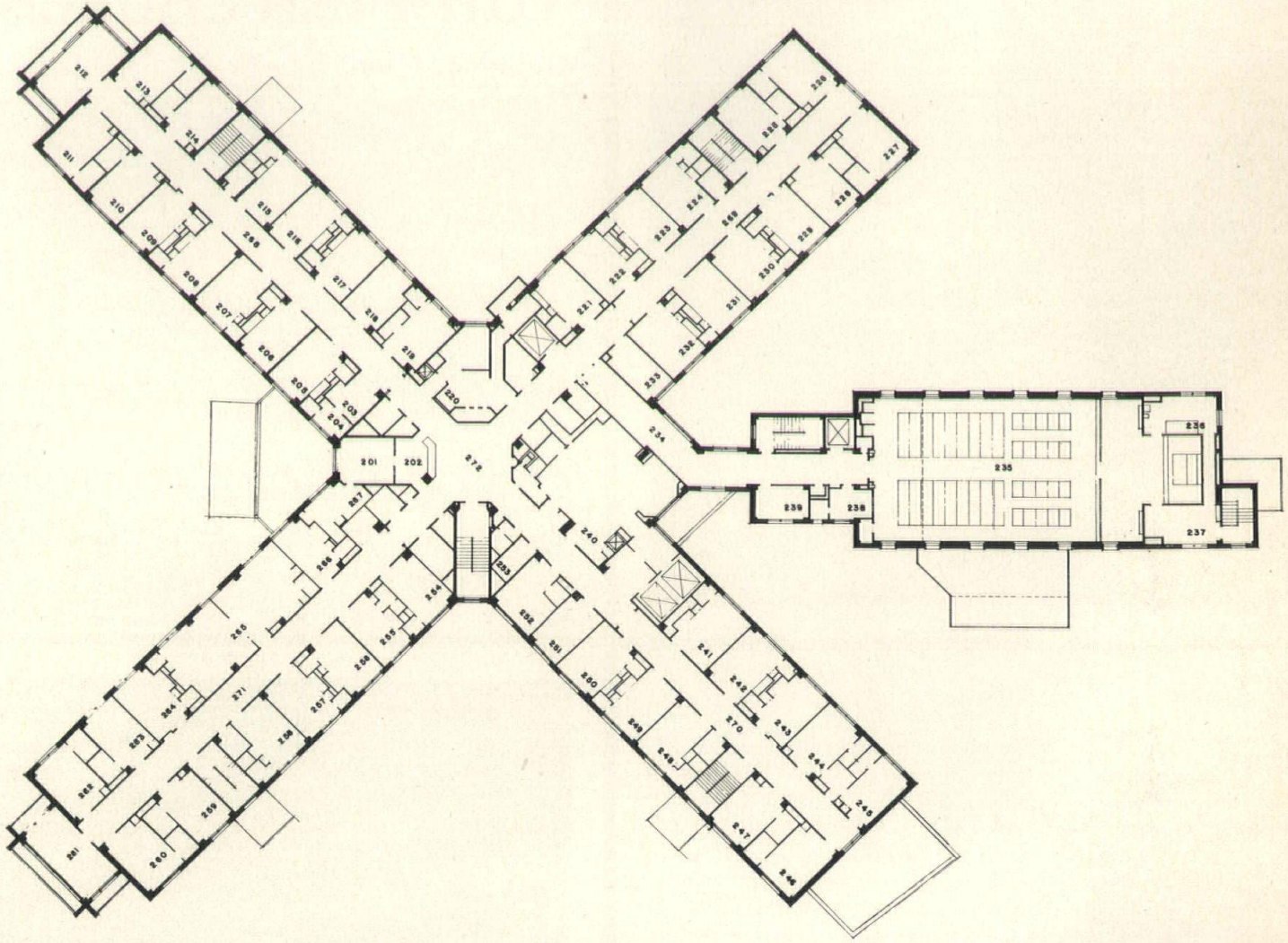
The northwest wing of the first floor is devoted to administration, pharmacy and supervisory sisters' quarters. The southwest wing provides facilities for records, classrooms and chaplains' quarters. The southeast wing has an enclosed, heated ambulance garage from which patients can be transferred to the hospital with complete protection from the weather. This wing also includes complete physical and hydrotherapy departments, emergency suite, doctors' entrance and staff rooms. The northeast wing contains the main cafeteria, dining room, special diet laboratory and special diet dining room.

The second floor provides two wings for psychiatric patients and two wings for medical patients.

The third floor is entirely devoted to medical and surgical patients with provisions for isolation.

The fourth floor provides a complete surgery department in one wing, pediatrics in another and

PLAN—NURSING FLOOR—AT CHAPEL LEVEL



quarters for sister technicians in another wing.

The fifth floor has one complete wing for labor, delivery and nursery together with required facilities. Two of the wings are for maternity patients and the other wing is for medical patients.

The basement is devoted to storage for the various departments together with provisions for lockers and toilet rooms for the personnel. Walk-in coolers have also been provided for storage of hospital supplies requiring lower-than-normal temperatures.

Present facilities consist of 150 beds exclusive of pediatrics, psychiatric and nursery with a possible addition of a sixth floor increasing the total to 300 beds.





OUR SAVIOR'S LUTHERAN CHURCH

Hibbing, Minn.

STRUCTURAL ENGINEERS: Schuett-Meier, St. Paul, Minn.

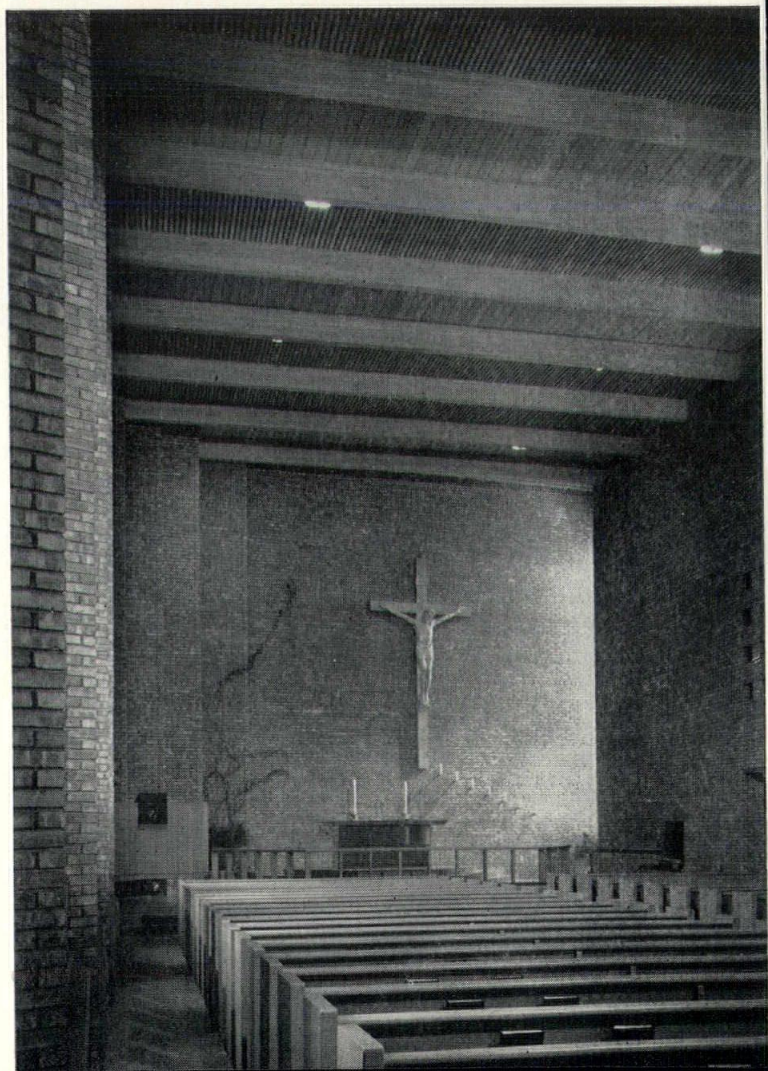
MECHANICAL & ELECTRICAL ENGINEERS: Gausman & Moore, St. Paul, Minn.

GENERAL CONTRACTOR: H. L. Stavn Company, Inc., Hibbing, Minn.

HEATING & PLUMBING CONTRACTOR: Seppala Plumbing & Heating, Hibbing, Minn.

ELECTRICAL CONTRACTOR: Sterns Electric, Inc., Hibbing, Minn.

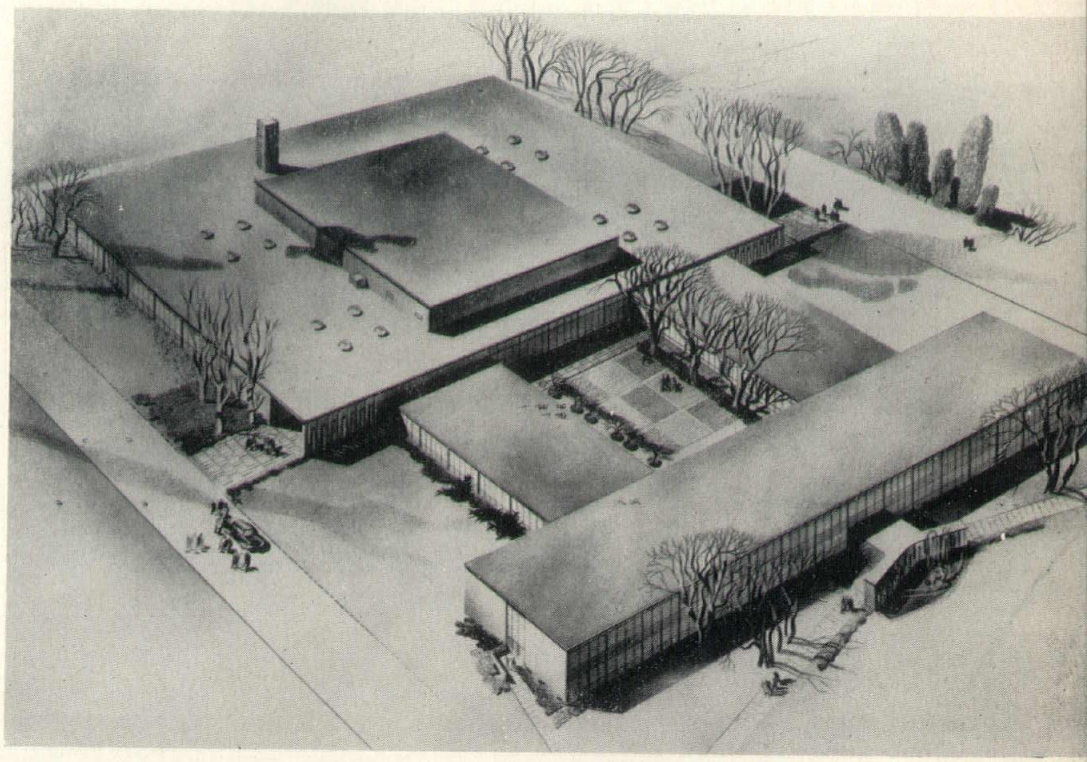
THE exterior of the church is a conservatively plain mass of mellow tan brick, relieved by stone-trimmed windows and the horizontal lines of protective canopies and low roofs. A 64-foot detached tower, rectangular in plan, furnishes a vertical relief from the horizontal lines of the roofs and windows and is surmounted by a 22-foot aluminum cross. The base of this tower also provides access to both the church and the social rooms beneath it and its stairway leads up to the broadcasting control room which overlooks the nave and chancel. Built into the upper right hand corner of the west front is a design representing in brick outline the head and shoulders of "Our Savior."



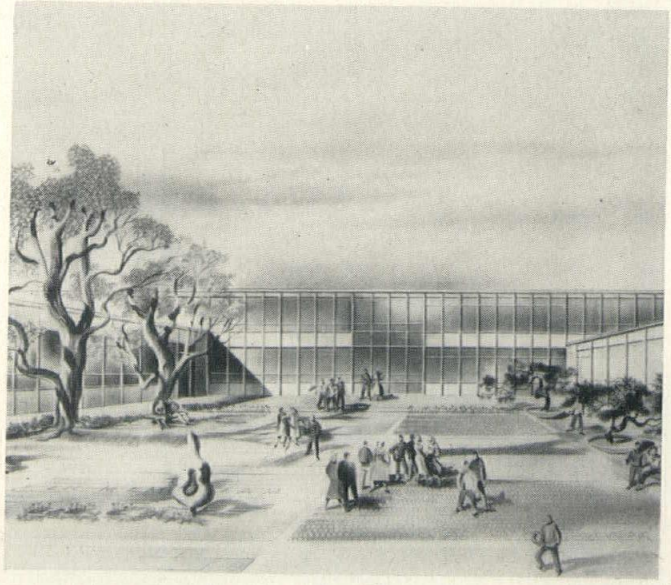
FAIRMONT PUBLIC HIGH SCHOOL

Fairmont, Minn.

ASSOCIATE ARCHITECTS: McClure & Kerr
STRUCTURAL ENGINEERS: Schuett-Meier, St. Paul, Minn.
MECHANICAL & ELECTRICAL ENGINEERS: G. M. Orr Engineering, Minneapolis, Minnesota.
GENERAL CONTRACTORS: Orville E. Madsen & Son, Inc., Minneapolis, Minn.
HEATING & PLUMBING CONTRACTORS: Axel Newman, St. Paul, Minn.
ELECTRICAL CONTRACTORS: Howard C. Draper, Mankato, Minn.



THE academic or two-story wing has been designed for a third-floor addition and is of poured concrete construction. The remainder of the building is steel skeleton construction with a bar joist and metal deck roof system. The exterior treatment of the building consists principally of curtain wall construction of aluminum frames and insulated window wall panels.

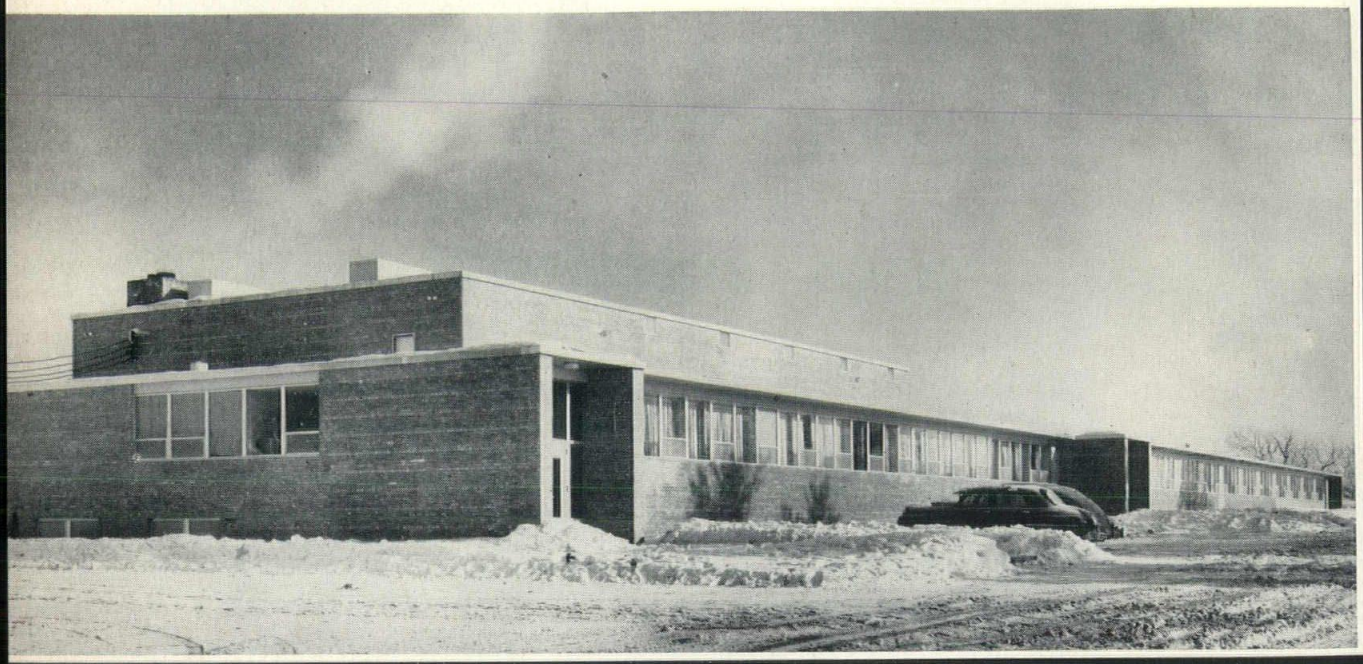


The academic wing houses complete facilities for home economics, the art department, speech department with small theater, science laboratories, commercial department, general classrooms and study halls, along with storage rooms and toilet facilities. This wing is connected to the larger gymnasium wing by two one-story wings given over to administrative offices, the school nurse's and teachers' rooms in the one wing and library and study facilities in the other.

The gymnasium wing contains, besides the combination gymnasium and auditorium, complete shower and locker facilities for both boys and girls, a music department consisting of a band practice room, chorus room, individual and assembled practice rooms, offices and instrument storage rooms, shops for wood working, industrial arts and agricultural courses, a cafeteria seating 250 with stage plus serving kitchen and faculty dining room. The heating plant, janitors' shop, toilet facilities and locker rooms for help are also located in this wing.

The present capacity of the school is about 850 students with an increase to 1,200 when the future third floor is added to the academic wing.

WESTWOOD LUTHERAN CHURCH and YOUTH CENTER – ST. LOUIS PARK, MINN.



STRUCTURAL ENGINEERS: Schuett-Meier, St. Paul, Minn.

MECHANICAL & ELECTRICAL ENGINEERS: Bird, Bird & Associates, Osseo, Minn.

GENERAL CONTRACTOR: Dean L. Withcer

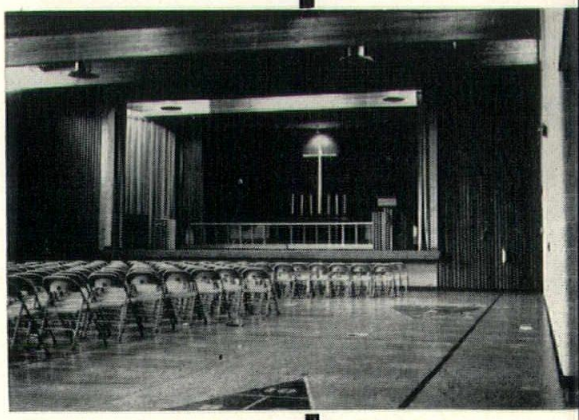
HEATING & PLUMBING CONTRACTOR: Humboldt Plumbing & Heating

ELECTRICAL CONTRACTOR: Marquette Electric

WESTWOOD'S new quarters, located on a 20-acre tract of land, are functionally designed to accommodate a broad scope of church and community activities. The new building contains 33,728 square feet of floor space. It has been planned so that each room or division can be used for a variety of activities, making the church's facilities flexible to the needs of worship, recreation, education and music.

The present building is the first unit of a long range building program, including church, recreational facilities, both indoor and outdoor, and church school. This first unit contains a combination gymnasium and auditorium (which is now used as a temporary church in addition to its planned functions) a large well equipped kitchen with adjoining storage and toilet facilities, shower and locker rooms for boys and girls, church and education offices, caretaker's apartment and a school wing.

The school wing consists of a young people's chapel, two lounges and game rooms, seven large classrooms with provisions for dividing them into 15 smaller units, a well equipped nursery and crib room and toilet facilities for the children.



WESTMINSTER

PRESBYTERIAN CHURCH & CHURCH SCHOOL

AUSTIN, MINN.

STRUCTURAL ENGINEERS: Schuett-Meier, St. Paul, Minn.

MECHANICAL & ELECTRICAL ENGINEERS: Gausman & Moore, St. Paul, Minn.

GENERAL CONTRACTORS: N. A. Peterson, Contractors, Austin, Minn.

HEATING & PLUMBING CONTRACTORS: Scheid Plumbing & Heating, Austin, Minn.

ELECTRICAL CONTRACTOR: Perry Electric Co., Austin, Minn.



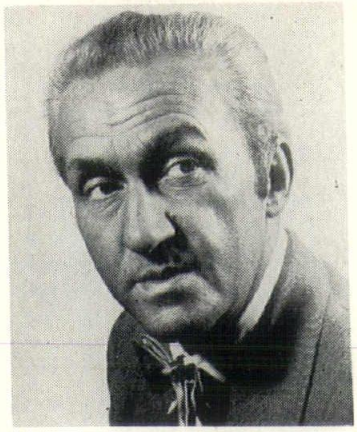
THE building is of steel skeleton construction with bar joist and metal deck roof systems with the exception of the church proper and the social hall, which have laminated wood arches supporting wood roof decking. The building is fundamentally a one-story structure with basement under only the storage portion of the church. These two basement areas are given over to heating plant and choir facilities.

All basic units of the building have as a focal point the large narthex. From there one gains access to the social hall to the north, the social parlor and chapel to the east, the school and office wing to the south and the church to the west. Coat rooms, storage spaces and toilet facilities are also located off the narthex and are centrally located for use by all groups occupying the building. To the east of the social hall, with access to the social parlor, is the well equipped kitchen with its own toilet facilities, storage rooms and service entrance.

The church will seat about 370 persons, the social hall will seat 240 at tables and the school wing contains 12 classrooms, nursery and infants' rooms, toilet rooms and office areas.



Reading Architecture



Mr. Keck

By GEORGE FRED KECK

A Talk Given Before the Minneapolis AIA Chapter

Today man relies heavily upon the written or spoken work for his information about the world around him. He cannot see, by and large—that is to say, he cannot read—the city as he walks down the street. He has eyes and sees not, or reads not.

I know intelligent men who are unaware of nature's beauties, except—and this is an important exception—as they read about such beauties and then go out to observe them. I have often walked down a street with friends totally unaware that there were at the moment in his street lovely trees in flower, some of the loveliest in the area. Had they read in a newspaper an article extolling the flowering season, they would have gone out of their respective ways to contemplate and marvel at these same trees.

Our powers of observation have been dulled to a large extent by the printed word. Stimulating as this printed word may be—and far be it for me to deny the vast importance of this printed word, its record in history and in libraries as a preservation of our accumulated knowledge, its continuing role in communication despite the newer forms of mass media, etc.—I feel strongly that we have lost our power of direct observation largely as a result of our dependence upon the printed word. We don't seem to know how to look at things—objects, landscapes, paintings, buildings—nor to read in these objects what people with a language of form and color have written.

To understand Picasso today many people find it necessary first to read a book about Picasso and then to look at his paintings. Often the reader does not even then understand Picasso for he has become entangled in the words until he cannot bring a direct approach to his observation. In reading about the object he has lost the ability to read the object itself. William de Kooning, in a recent symposium conducted by the Museum of Modern Art, stated, "Kandinsky understood 'Form' as a form, like an object in the real world and an object, he said, was a narrative—and so, of course, he disapproved of it. He wanted his 'music without words.' He wanted to be 'simple as a child.' He intended, with his 'inner-self,' to rid himself of 'philosophical barricades' (he sat down and wrote something about all this). But in turn his own writing has become a philosophical barricade, even if it is a barricade full of holes."

Non-objective artists are often called upon to explain their paintings, with varying results. Calder said in the same symposium from which I quoted above, "that others grasp what I have in mind seems unessential, at least as long as they have something else in theirs." And Fritz Glarner says, "A painter should never speak because words are not the means at his command. Words cannot express visually dimension at a glance—they can only establish their own relationship in time. However, it is possible for a painter at certain moments of his development to formulate some of the problems he is facing in the growth of his work. A painting cannot be explained. Words can only stimulate the act of looking."

Just so architects, and especially when they work in the new forms, are asked to explain their architecture. They try to do so through the usual means of communication: public lectures, informal talks, radio and, today, television broadcasts. They even write books on their architecture. As a group, however, we architects are not good writers. There are only a few of us who have mastered the poetry of words. Our Hudnuts are rare. The rest of us speak far more eloquently through our pencils on our drafting boards and by our actual buildings. And it is through these buildings, our architectural achievements, that we should be read. Interesting as the books of Frank Lloyd Wright may be, it is his buildings themselves that are far more articulate than his words. And his architecture is more widely read than his words and it will continue to be read long after his books are out of print or forgotten.

Here then is a plea to learn to read architecture, to sharpen our awareness of it as we walk down the street, to learn to experience the street and learn from it its history, its sociology, is purpose. We must observe how people use and feel the street itself, the house,

the structure and the spaces surrounding these man-made devices that serve man. As man-made devices they are works of art. As works of art they achieve significant form and please or displease the senses and the intellect, depending upon how well they serve their purposes. And of these forms architecture is made. If they perform their functions well and if they please the senses they may be read as good works of art. As works of art they can be whatever a good book can be: intelligent, readable, serious, biographical, gay, witty, tragic —what you will. They can be what a human being can be and can enter into his moods. The practicing architect when he produces his works contributes to them the artistic substance of which he is capable.

What then shall the observer look for when he attempts a reading of the architecture around him? What elements must the architect have written into his work?

After intelligent analysis he must have displayed an awareness of his surroundings and of their inter-relationship to the region, to the street, to the site, to the landscaping. He must have imparted the purpose and the function to which the structure is dedicated, through the language of the spaces and the shapes that determine its use. Here obviously the plan and the form of the building are displayed and bring with them the importance of proportion, balance and scale, adding up to a harmonious and esthetic whole. Form has not necessarily followed function. It has, rather, flowed and flowered out of function.

The architect, moreover, must have chosen his materials well with regard to their availability, to the essential nature of the materials themselves used singly or in combination and to their adaptability. The materials should have been selected on the basis of their indigenous nature and should have been used with logic and understanding. The architect through his building must have made a forthright direct statement, translating the fluidity of the plan through the form into a readable end result.

He must also have written into his achievement his grasp of historical and sociological perspective, an exposition of the relation of the building to its social and cultural intent and the social and cultural intent of the community, and object of art which is a part of a larger community, the entire community, which serves its function in serving the people. In this sense, every family contributes to the community and every family must understand the implications of its impact in the community. Only in this way can an interest and improvement of a community come about and a readable whole develop.

The printed word itself is an art form and can be many art forms, from poetry to the written drama through all the forms of written literature. In terms of numbers of people interested in one art form or another I suppose that printing easily obtains the lion's share of interested people. That it has grown so sizable is good for it is educational and of course is helpful as such to other expressions in art forms—people cannot do without architectural forms—down to the lowest shelter elements. So all people must take part, since they are a part, of architecture. We architects cannot do without people and their needs and opinions help in every way to formulate our achitecture, which is the great art form of all time because it is inclusive and embraces all of the other arts.

It may also be true that, like the total mass of literature, so much is trash and so little worth reading, so too the architecture of our cities is mostly trash and largely not worth reading. Continual observation of it, as we walk down our streets in our daily routine also dulls the sensation and the imagination and sets up within us a reaction of acceptance of our surroundings and dulls our senses.

These points are easy to argue and we can conjure many reasons for lack of interest in our surroundings. It is also true that our surroundings *are* dull, unimaginative, thoroughly bad, meaningless and, certainly for those of us who are sensitive to form, not worth looking at. I think instinctively this is the general reaction to the most of our man-made environments.

Our long straight streets, on the grid plan, are dull —there is no relief. Paris has its long, straight streets but there is relief, visually. I do not mean to imply that we cannot make straight streets interesting; we can, but only with great regard to building forms, interspersed with relief in varying forms, color, lights, shadow and height and scale. Many of these points are forgotten in the American street.

The fault, I believe, is largely ours, we architects for we are responsible—and irresponsible. The better we are as architects the bigger the commissions we seek. We neglect horribly the little commission and the street and the city are made up of little commissions. When the city does not flourish, in part because of our neglect, we sing sad songs about the death of cities.

The building form itself is an abstraction, just as music is an abstraction and even language is an abstraction. The spoken word is ephemeral and dies with the speaking. Music is the same and dies with the playing. In each of these cases, however, the content and form can be written and can be spoken or played again and again. Of all the art forms language is the most exact. The slightest deviation or inflection in voice carries precise meaning in language and is generally,



Garden Court Apartment Building for Pioneer Co-op, Inc., Chicago

universally understood. Next come music—its flow of sound is not so precise as language and lends itself therefore to broader interpretation by the intellect. Painting too follows, somewhat similar to music with the flow and interpretation of form and color not too precise but stimulating and reaching generally responsive moods in the intelligence. Finally, architecture and building, motivated by a greater width of interpretation—materials—use—form, even so has its accepted general form and interpretation inviting certain uniform responses in us. But these responses are so broad that they provoke opposing viewpoints as in other arts, including literature, but in literature, because of the precise meaning of words, we can quarrel not with the sounds but with the broader concepts of idea. So we must quarrel and have great discussions about architecture not only among ourselves but with all people, for only in this way can we again bring to all people an understanding of Architecture.

"Architecture, therefore, by reason of its twofold nature, half art, half science, is peculiarly dependent on the tastes and demands of the layman," said Osbert Lancaster in his "Pillar to Post" and, whereas in the other arts a neglected genius working in his garret may just conceivably produce a masterpiece, no architect has ever produced anything of lasting significance in the absence of a receptive public.

"To-day architecture is an activity about which the average man cares little and knows less and such views as he may hold are founded not on any personal bias, which might be regrettable but would certainly be excusable, but on a variety of acquired misconceptions. This was not always the case; in the eighteenth century every well-educated man considered himself entitled to express his opinion about the moulding of a cornice or the disposition of a pilaster and in nine cases out of ten was possessed of sufficient knowledge to lend it weight. But early in the nineteenth century this happy

ABOUT GEORGE FRED KECK

George Fred Keck, eminent architect of Chicago, Ill., was a guest critic at the School of Architecture, University of Minnesota, during January, 1956. Mr. Keck "is the link bridging an earlier sound architecture and a younger generation which by now has gone a long way towards reestablishing an historical continuity."

Returning from France after World War I he reentered the University of Illinois to study architecture. However, instead of the "regular" course, he chose architectural engineering, a course dealing not with the classical orders, rendering and facade design but with practical aspects of construction. At this time Sullivan and Wright were prophets without honor in their own country (in Europe and the Orient their work was favorably known and highly influential) and Mr. Keck was largely uninfluenced in his decision to work in a manner dictated by present-day techniques. He was, even at this period, most conscious of aesthetic possibilities—the concentrated engineering work was a discipline submitted to in the belief that architecture must be founded on sound engineering principles and that an aesthetically valid building could not exist independently of these engineering principles.

He painted watercolors in his free time, a form of creative expression he has continued to the present. Mr. Keck paints in an extremely pure style of watercolor used as watercolor, a parallel to the architectural use of materials in accordance with their properties. His direct emotional approach to painting serves as a release from the discipline of architecture. The architecture, however, reveals the same intuitive basis, combined with the mechanics of making things work.

Mr. Keck has a strong interest in architecture and design education and when the late Moholy-Nagy founded the Institute of Design he became head of the architecture department, remaining there until 1944.

Mr. Keck's "House of Tomorrow" was an exhibition house at the Century of Progress in Chicago 1933 and was moved to a new site and altered for a residence after the exposition. This "House of Tomorrow" was one of the most radical houses that had been executed in the world. A structural steel skeleton with exposed tension cross-bracing supported the floors and the non-load bearing outer walls, which were entirely of fixed glass in storefront construction. Ventilation was by air-conditioning. It was extremely crisp, closer by far to European work of the time than to anything that had been built in this country. It differed, however, from the new European work in that none of the latter had so departed from rectangularity in plan. No responsible architect would have built for permanent occupancy a house completely of glass, as one would expect the expense of heating (and cooling) to be exorbitant. Mr. Keck was agreeably surprised when on the first cold days of winter fuel consumption was not high and he tried to persuade a glass company to heat the house through the winter so that data could be compiled on temperatures and heating costs. The company refused and subsequently was unable to advise as to how much glass could be safely used for a client willing to accept unlimited use of glass.

The second year of the Chicago World's Fair Mr. Keck decided, against better financial judgment and with only an inaccessible location available, to build a second exhibition house. "The Crystal House" of 1934 was amazingly advanced and clean cut, technically and aesthetically—completely of welded steel construction, floors of welded steel plate, exterior walls entirely of glass and a completely open plan in which every division of living space within the structural shell was made by arrangement of furniture and placement of cabinet, wardrobe or storage units. The exterior latticed supports gave an effect of extreme thinness and elegance—entirely in the best spirit of contemporary architecture, though they violated the rather rigid dogma of flush, smooth exteriors that was being propounded at the time as a rule of contemporary architecture.

Some of Mr. Keck's water colors were on exhibition in the School of Architecture and he spoke at the monthly meeting of the Minneapolis Chapter, American Institute of Architects, on Thursday, January 19. He also gave a public lecture in Murphy Auditorium on the campus.

state of affairs came to an end and architecture was removed from the sphere of everyday life and placed under the jealous guardianship of experts and esthetes. Faith became a substitute for knowledge and very soon the ordinary person came to consider architecture in the same light as higher mathematics or Helgelian philosophy, as something which he could never hope to understand properly and possessed of a scale of values that he must take on trust. With the advent of Mr. Ruskin, whose distinction it was to express in prose of incomparable grandeur thought of an unparalleled confusion, this divorce from reality became complete and in less than no time the whole theory of architecture had become hopelessly confounded with morals, religion and a great many other things with which it had not the least connection, while its practice went rapidly to pot."

Form not only follows function but in our architecture it also follows desire and ambition too. How many of you know the little hill town of San Gimingnano, near Siena, in Italy? A medieval walled town, it was originally a town of towers, about 57 in all, of which today about 13 survive. No ambitious nobleman could build his tower higher than the village hall tower, however. These towers are somewhat similar to the towers often seen in other Italian towns such as Bologna or Rappallo. Our cities today follow much the same pattern for the same reasons, with no city hall to hold them down. Today its Chrysler, or Foshay or what not that dominates the centrum of the town. Downtown Minneapolis, seen at sundown from the campus, is the same city built by men whose interests haven't changed much from the middle ages. And we can read these thoughts and ambitions in the architecture we see and know.

If much of our architecture and building is trash, well, a lot of people like to read trash. If its design has virtues, such virtues will become apparent to the intelligent observer. Any architectural design has value esthetically and practically in direct proportion to the effort and talent expended upon it. In this respect again it does not differ from the other art form we know and enjoy. If we describe a poem as having rhythm, cadences, musical sounds, body and inspiration, these same words can be and are used to describe building.

I wish that we had architectural writers and critics who would write columns in the papers about our buildings. We have them in the other art forms—plays, concerts, art shows, books, all are discussed by people and writers competent to analyse and resolve them. We do have a few architectural critics and some few historians. I, myself, am always anxious to read what Lewis Mumford has to say about architecture, either in his books or his critical articles in the New Yorker and elsewhere and I am sure that well organized criticism will have a wide audience and stimulate among people an interest in an art they do not as a rule think of as such.

It is reasonable to suppose at this stage in our building industry that our young aggressive instincts are too intent upon the dissatisfaction with existing forms (perhaps, also, because many such forms are trash and of no permanent value) that the periodic tearing down and the rebuilding of our cities is desirable. And it is also necessary for we are in a rising curve of modern life whose needs are constantly expanding. So the stories of our cities change with us and with our needs and desires. If our city streets today read differently than they did in the past, it is only that we too read differently than we have in the past.

Thanks to whatever gods there be there is a tremendous vitality and interest in architecture today. It is receiving much more attention than it ever has in the past and, although much is bad, the general trend is upward. We must remember that the changing cycle in architecture is a slow one and we must all be patient. Many of us have seen the slow, painful death of an architecture that should never have been born. I think we can look with confidence to a new, youthful architecture that, to be sure, makes many mistakes but is headed in a direction that will bring fantastic results.

PLANS BEING MADE FOR 22ND ANNUAL MINNESOTA SOCIETY OF ARCHITECTS CONVENTION

The convention steering committee for the 1956 meeting and convention of the Minnesota Society of Architects has announced that the convention will be held in the Nicollet Hotel in Minneapolis on June 7 and 8, 1956. A tentative program has been set up which will include professional studies and seminars during the sessions Thursday morning and afternoon and also Friday morning. The main business session of the convention, which is the annual meeting, will be held Friday afternoon. The official luncheon of the convention will be held in the Terrace Room of the Nicollet Hotel on Thursday noon. Preliminary contact has been made for an interesting speaker for the luncheon meeting. The convention will conclude with the usual dinner dance to be held in the Terrace Room on Friday evening, June 8. Again this year product exhibits will be an important feature of the convention.

J. Milton Leadholm is chairman of the convention steering committee and is being assisted by John Magney, R. V. McCann, Ralph B. Shimer, Eugene E. Hickey, Gerhard C. Peterson and Charles McFarland.

DULUTH BUILDERS EXCHANGE HOLDS 53rd ANNUAL BANQUET

The 53rd annual banquet of the Duluth Builders Exchange was held February 2 in the Hotel Duluth. Robert S. Mars, Jr., newly elected president of the exchange, presided. A feature of the program was the honoring of past presidents of the exchange and presenting to them of scrolls recognizing their contribution to the organization. The honored guest of the evening was Ruth Wallin of the secretarial staff. In recognition of Miss Wallin's 35 years of service to the exchange she was presented with a new car as a gift from the members.

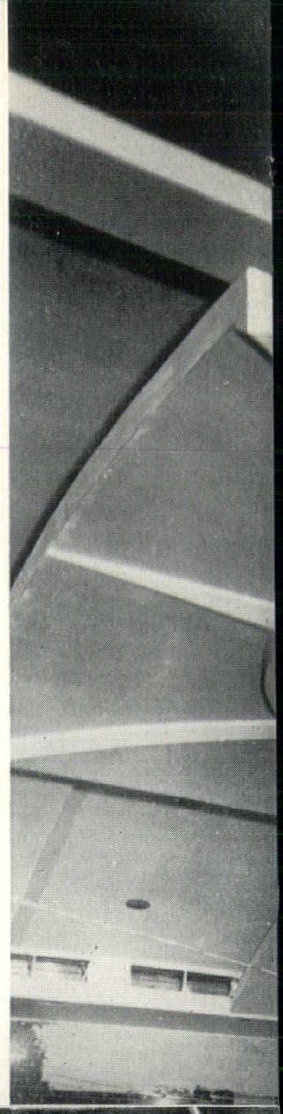
GENUINE LATH and PLASTER OFFERS SO MANY ADVANTAGES

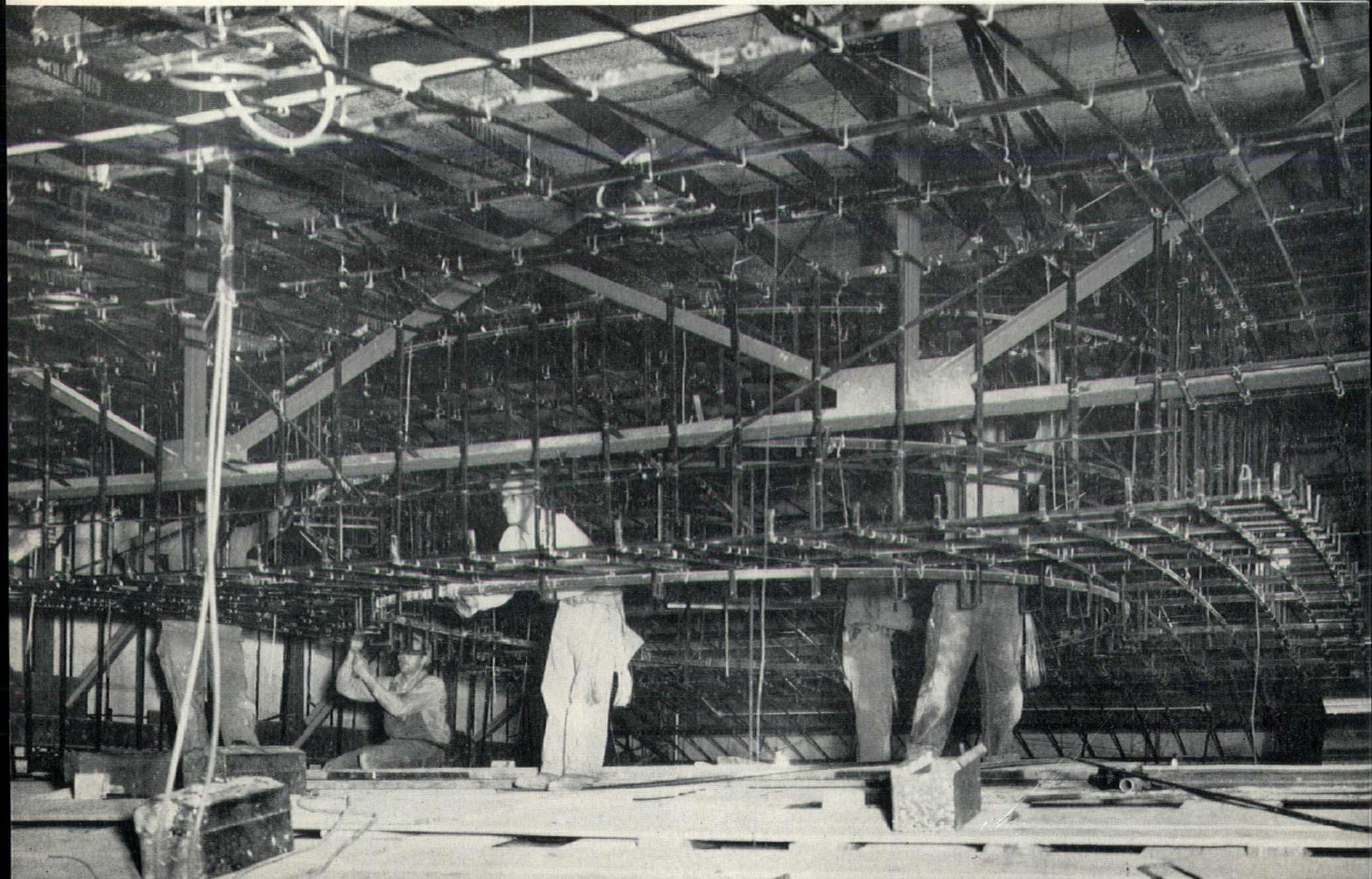
STRENGTH
VERSATILITY
FIRE-SAFETY
BEAUTY

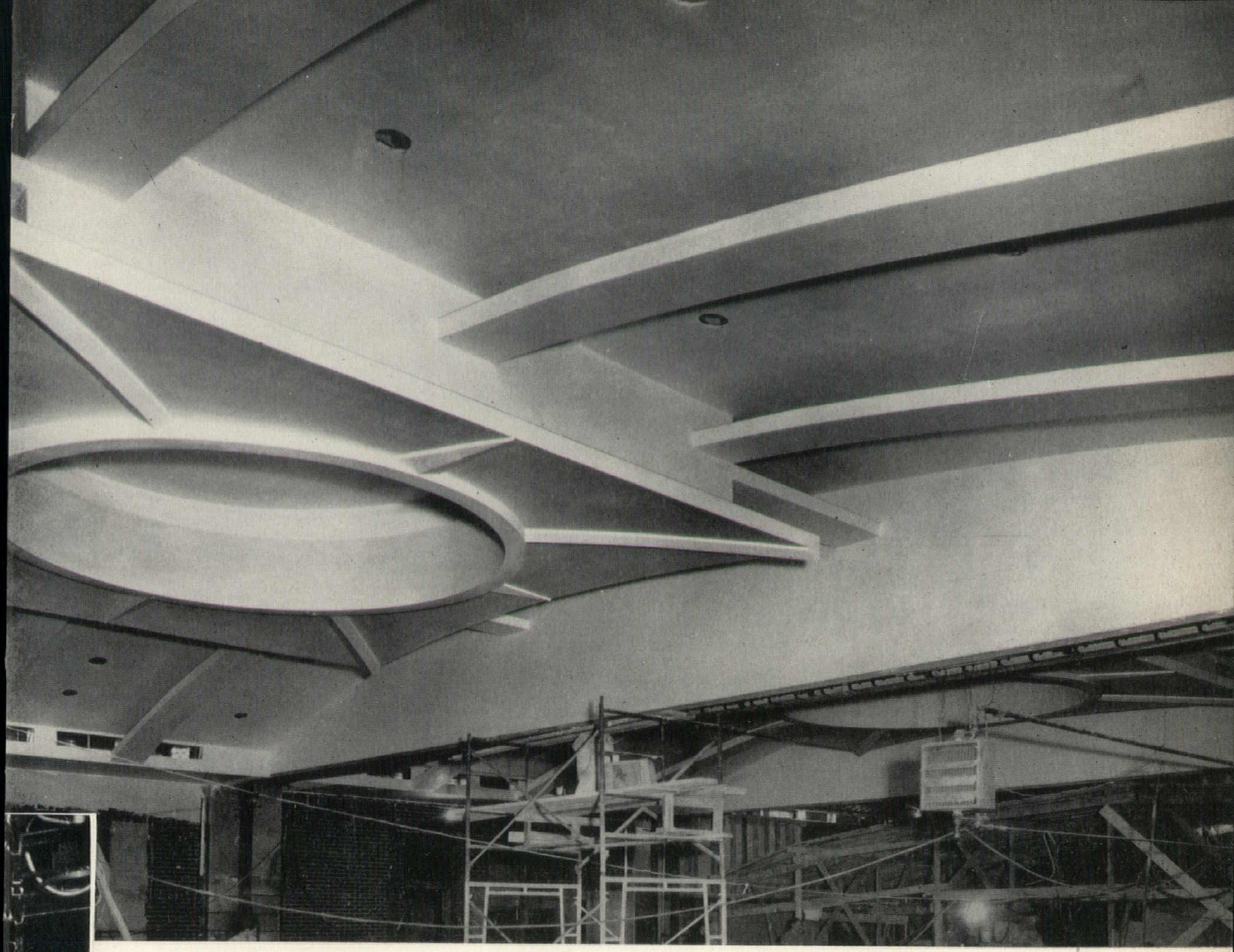
An excellent example of the strength shown in the supporting framework for metal lath and plaster of ceiling sections in the new Leamington Hotel "Hall of States", Minneapolis, Minnesota.

Shaped and formed to carry out the minutest detail of the architect's vision and plans by the skilled hands and minds of metal lathing craftsmen.

Tied and welded together for support and strength to last far beyond the useful life of the building, and providing unlimited design for the installation and servicing of: electrical, air-conditioning, and heating facilities.







Completed by the expert trowel tradesmen . . . the architect's vision and plans have been carried out to receive the decorator's brush, and the eventual enjoyment and safety of the public.

The Minnesota Lathing and Plastering
PUBLIC RELATIONS BUREAU

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Chapter, Club and other news . . .

THREE MINNESOTA DESIGNS TAKE HONORS IN PROGRESSIVE ARCHITECTURE CONTEST

Three designs by Minnesotans took award citations in the annual *Progressive Architecture* contest, the awards being in the categories of education, religion and industry.

The design by Hammel & Green, St. Paul architects, and Bernard J. Jein, architect of Albert Lea for the proposed Southeast Elementary School in Albert Lea won an award citation in the education category. The school's plan was highly recommended by the awards jury for its clarity.

A design by Jyring & Whiteman, architects of Hibbing, for the proposed First Lutheran Church in Virginia, took an award citation in the religion category. The award was presented by editor Thomas H. Creighton at an awards banquet held in Detroit on January 20. This design was shown in the special AIA convention section of *Northwest Architect* last summer.

Richard T. Acott, architect of Minneapolis, won his citation for a proposed prototype aircraft hangar. He won in the Industry Category. The prototype aircraft hangar will be demountable and is to be sold in "kit" form throughout the country by a Minneapolis firm called Prototype Aircraft Hangars, Inc. The Design Awards Jury admired the design's efficient application to its purpose and also thought that it would have many other uses as a shelter building.

BOARD OF DIRECTORS OF MINNESOTA SOCIETY OF ARCHITECTS MEETS

A meeting of the board of directors of the Minnesota Society of Architects was held on January 24, 1956. The board of directors has gone on record endorsing the society's participation in a legislative program to attempt to get legislation to set up a commission for metropolitan planning in the five-county St. Paul-Minneapolis area. A bill to provide such legislation came before the 1955 session of the legislature but because of the rush of business in the closing days of the session the bill was not passed.

The board of directors heard committee reports from several committees, including a final report of the 1955 convention committee and the budget, enforcement, education and publication committees.

Of particular interest to the board of directors was the publications committee report, covering the first year of the mutual operation and publication of the *Northwest Architect*. The committee reported a successful year and also noted from comment by the readers that the magazine is enjoying an unusual readership acceptance.

FILM "ARCHITECTURE U. S. A." ON ITS WAY

As announced in the last issue of the *Northwest Architect*, the board of directors of the Minnesota Society of Architects is purchasing the film "Architecture U.S.A." to be used in showings throughout this area. Because of the huge demand for prints of the film, the order from the Minnesota Society of Architects had to wait until a new supply was available from the producer. The society has received word that a second order of prints is on its way and that the Minnesota Society of Architects should receive the film by the end of February.

As soon as the film is received, it will be shown at

GARGOYLE CLUB OF ST. PAUL ENTERTAINS

Architects, architectural draftsmen, landscape architects, artists and sculptors who are members of the Gargoyle Club of St. Paul gathered as shown in our pictures for a gala holiday session, the club's annual Christmas Party.

Don Haarstick, AIA, is president of the group, having recently succeeded Holger Mortensson. Tilford Moore is vice-president of the group and Robert Kerr is secretary-treasurer. These make up the board of directors together with Directors Ken Fullerton, Ben L. Anderson, Magnus Jemne and Bill Loomis.

The Gargoyle Club was organized in 1913 and is considered unique in its makeup. It was incorporated in 1917. Each year the group awards a University of Minnesota senior student in the School of Architecture the Gargoyle Club Prize for the best senior thesis. Most recent winners of the prize were L. Montagu Hanson and David Paulson, with Kenneth Peterson as honorable mention runnerup.

Shown on the opposite page are some of those who attended the Gargoyle Club event. Row by row, left to right, they are—

Don Haarstick, Ken Fullerton and Del Corwin—George Townsend and Phil Bettenberg.

Don Haarstick, Gene Flynn and Grover Dimond—Tom Ellerbe, Clarence Erickson, Ben Anderson and Ralph Smalley.

Bob Howe, Orin Field and A. L. Manion—Al Meinke (standing), Elza Gardner and Larry Hovik.

Reverdy G. Meinder, A. H. Haxton, Trol Minuti and Earl Beddow—LaMont Kaufman, Art Bryce and Rudy Zelzer.

Bob Dunn, John Duerr and Tom Lynch—Dick McLean, Jack Rickey and Carl Staege.

Bill Loomis, Ken Fullerton, Max Buetow and Jim Hiemeyer—Don Denzer, Rogers George and Bud Shannon.

Curly Roberts, Bob Jackels and Jerry Buetow—Jack Witherspoon, Bill Ingman, Max Buetow and Arnold Melius.













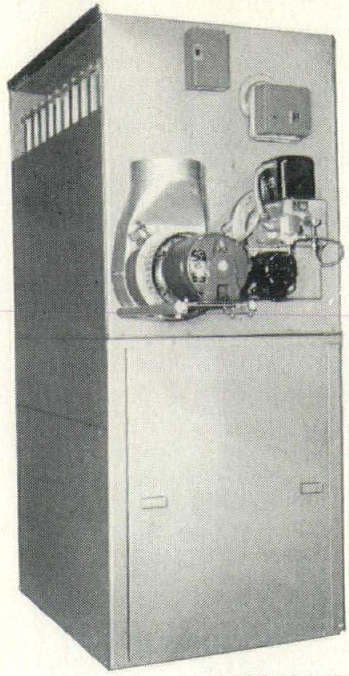



TJERNLUND

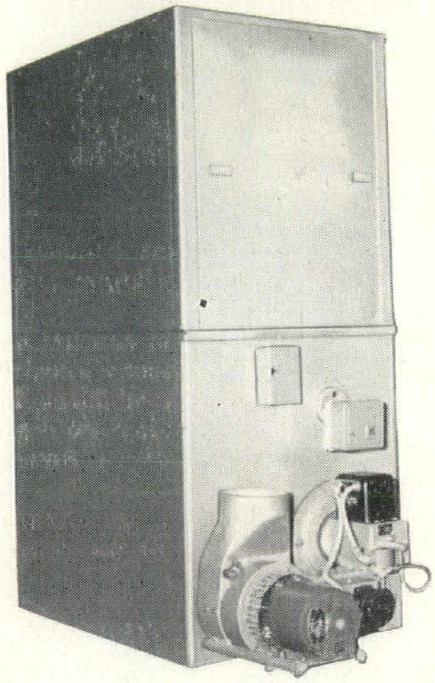
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Heavy Duty Units—Output To 3,000,000 B.T.U.



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ENGINEERING DATA

Model	BTU Output	CFM 3/8" S.P.	Input Nat Oil GPH	Input Nat Gas CFH	Blower Phase H. P.	Blower Phase Volt	Blower Phase RPM	No. Wheels	Wheel Size	Filters Quan.	Filters Size	Approx. Ship Wt.
35	134,000	1600	1:20	160	1/4	1/110	680	1	12x12	2	16x25	350
50	184,000	2300	1:65	230	1/3	1/110	560	1	14x14	4	16x20	400
70	224,000	2800	2:00	280	1/2	1/110	600	1	14x14	4	20x20	500
100	336,000	4200	3:00	400	3/4	1/220	520	1	16x16	4	20x25	650
150	500,000	6300	4:50	600	1	3/220	500	2	16x14	6	20x25	950
200	670,000	8400	6:00	800	1 1/2	3/220	450	2	18x16	8	16x25	1200
280	896,000	10000	8:00	1000	2	3/220	480	2	18x18	8	20x25	1500

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chapter meetings and it is hoped that the members will arrange for further bookings of the film at service, fraternal and social organizations. A number of requests for the showing of the film when it arrives have already been received at the office of the society.

SHIFFLET, BACKSTROM AND ASSOCIATES IS FIRM'S NEW NAME

Reorganization of the Minneapolis architectural firm of Shifflet, Backstrom and Carter, with withdrawal of George H. Carter from the firm, has led to the new name for the group of Shifflet, Backstrom and Associates.

Glynne W. Shifflet, president of the Minnesota Society of Architects, and Kenneth A. W. Backstrom, both AIA, are principals in the new firm. Associates are Marlin D. Hutchinson and Arthur H. Dickey.

MADSEN NEW PRESIDENT OF STRUCTURAL CLAY INSTITUTE REGION SIX

M. C. Madsen of the Twin City Brick Company, St. Paul, was elected president of Region Six of the Structural Clay Products Institute at the group's annual meeting recently in Des Moines, Iowa. The institute is made up of brick manufacturers in Minnesota, North Dakota, South Dakota, Wisconsin, Iowa and Nebraska. The business sessions of the group heard that brick sales in this region during 1955 were 37.6 per cent higher than in 1954 and the rate of increase in this region was double the national increase of 19.5 per cent.



Mr. Madsen

TORSETH BECOMES ARMSTRONG & SCHLICHTING ASSOCIATE

John C. Torseth has been named an associate of the Minneapolis architectural firm of Armstrong and Schlichting. Mr. Torseth joined the firm, whose practice consists largely of school, church, hospital and institutional architecture, in 1954. Educated at the University of Minnesota School of Architecture, he has recently been in charge of several of his firm's large projects. He lives in St. Paul.

HORAN NAMED MAGNEY, TUSLER AND SETTER ASSOCIATE

James Horan has been named an associate and chief draftsman in the firm of Magney, Tusler and Setter, Minneapolis architects and engineers, according to an announcement made by W. H. Tusler, senior partner in the firm which has offices in the Roanoke Building and which is one of Minnesota's largest architectural and engineering firms.



Mr. Horan

Mr. Horan, 32, lives in Richfield and has been with the firm since 1950. He was previously associated with the University of Minnesota, Physical Plant, in design work. He holds a bachelor of architecture degree from the university and is a member of the American Institute of Architects.

Born and raised in Minneapolis, he is married and has four children. He served with the army during World War II.

DULUTH CHAPTER ELECTS HANSON

Duluth AIA's elected Harold E. Hanson as president of their chapter at a recent meeting. Mr. Hanson, associated with the Harold Starin company, succeeded A. R. Melander as president and thus also became a member of the Minnesota Society of Architects' board of directors.

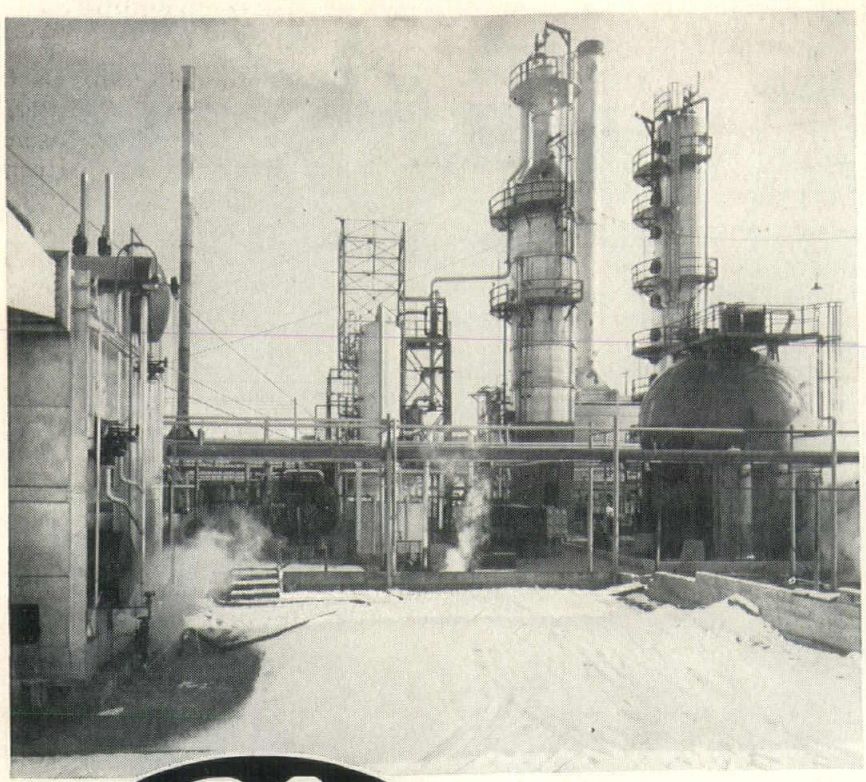
Norman K. Fugelso of the Melander firm was named vice-president and W. E. Ellingsen of W. E. Ellingsen and Associates was named secretary-treasurer.

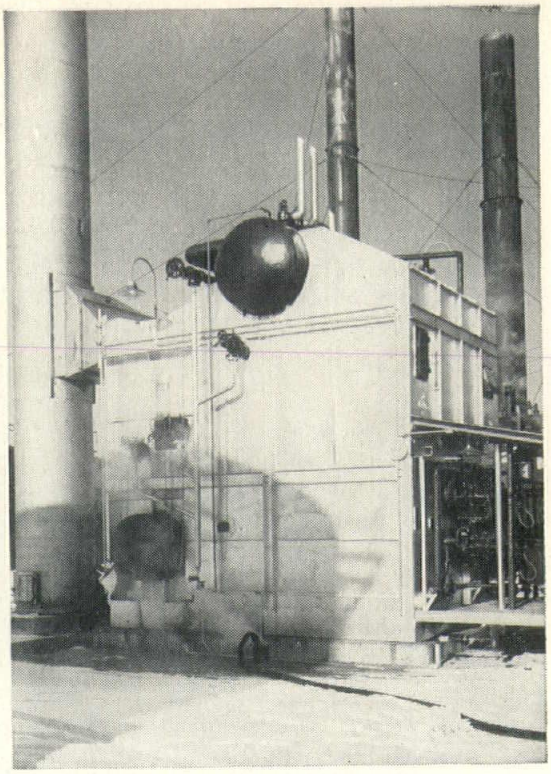
DAVIDSON, KUHR FORM GREAT FALLS PARTNERSHIP

A new architectural firm has hung out its shingle in Great Falls, Mont., where David S. Davidson, AIA, and William H. Kuhr have formed a partnership for general practice of architecture and engineering.

AUSTIN'S KANE ADDS GRAVES TO STAFF

Ben R. Graves recently joined the staff of the Warren W. Kane architectural office in Austin, Minn. Mr. Graves, a graduate of the University of Oklahoma, has moved to Austin from Sioux Falls, S. D., where he was chief draftsman for the firm of McWayne and McLaughlin since June, 1951. His experience in Sioux Falls included work on schools, dormitories and churches.





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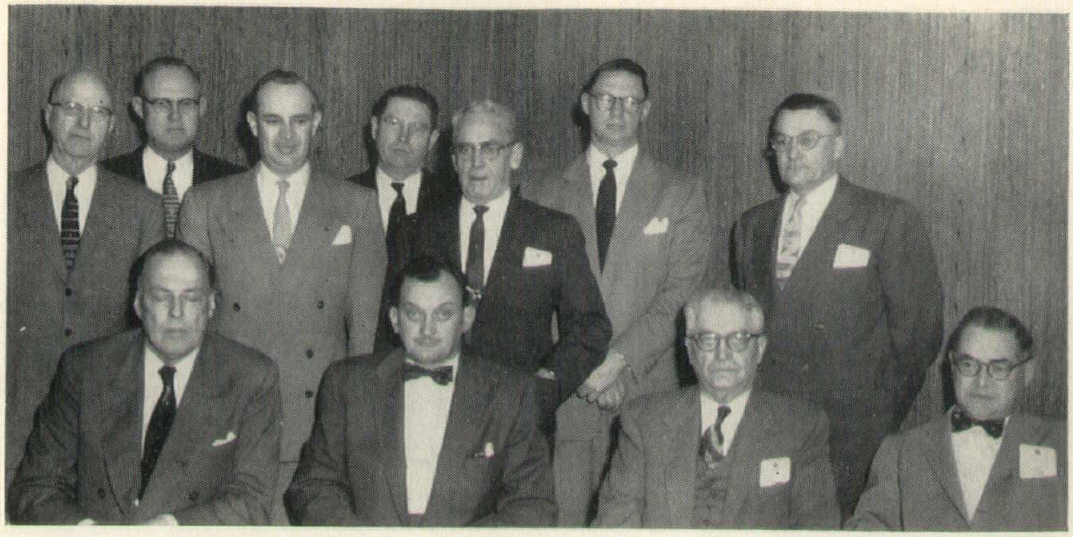


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AGC Minnesota Convention Draws 450-Plus



The new board of directors and officers of the Minnesota AGC are shown above. Seated (left to right) are Ray V. Johnson, Winston Bros. Company, Minneapolis, retiring president, who also completed his term on the board; L. C. Halverson, Madsen Construction Co., Minneapolis, 1956 president; H. P. Phelps, St. Paul Dredging Co., secretary-treasurer; and R. J. Hendershott, manager. Standing are M. E. Souther, M. E. Souther Construction Co., St. Paul, vice-president, Heavy Division; B. K. Soby, John Dieseth Co., Fergus Falls; Richard R. Steenberg, Steenberg Construction Co., Inc., St. Paul; vice-president, Building Division; R. O. Ashbach, Ashbach Construction Co., St. Paul; Howard Ganley, Howard Ganley, Inc., St. Paul, vice-president, Highway Division; Vance A. Johnson, Al Johnson Construction Co., Minneapolis; and Joseph Veranth, Fowler-Veranth Construction Co., Duluth.

With more than 450 members and others in attendance, the 37th annual convention of the Associated General Contractors of Minnesota elected Lyell C. Halverson of the Madsen Construction Company, Minneapolis, its 1956 president during sessions on January 12-13-14 in St. Paul. He succeeded Ray V. Johnson of Winston Dros. Co.

Other officers elected by the board of directors were Richard R. Steenberg of Steenberg Construction, St. Paul, builders division vice-president; Howard Ganley of Howard Ganley, Inc., St. Paul, highway division vice-president; M. E. Souther of M. E. Souther Construction Company, St. Paul, heavy division vice-president; H. P. Phelps of St. Paul Dredging Co., St. Paul, secretary-treasurer.

New directors elected at the general election included Joseph Veranth of Duluth, B. K. Soby of Fergus Falls and Vance A. Johnson of Minneapolis.

Roy N. Thorshov, AIA, Minneapolis, of the firm of Thorshov and Cerny, addressed the convention on "What the Architect Expects from the Contractor." C. H. Bingham of Kraus-Anderson of St. Paul Co., co-chairman of the AIA-AGC Co-operative Committee, reported to the convention on joint efforts of the two building industry associations.

Dean M. Schweickhard, Minnesota commissioner of education, addressed the builders' division luncheon on progress of the state's school building program and other important reports were given to division and general meetings.

Thorshov Outlines Mutu ality of Work of Architects and Contractors

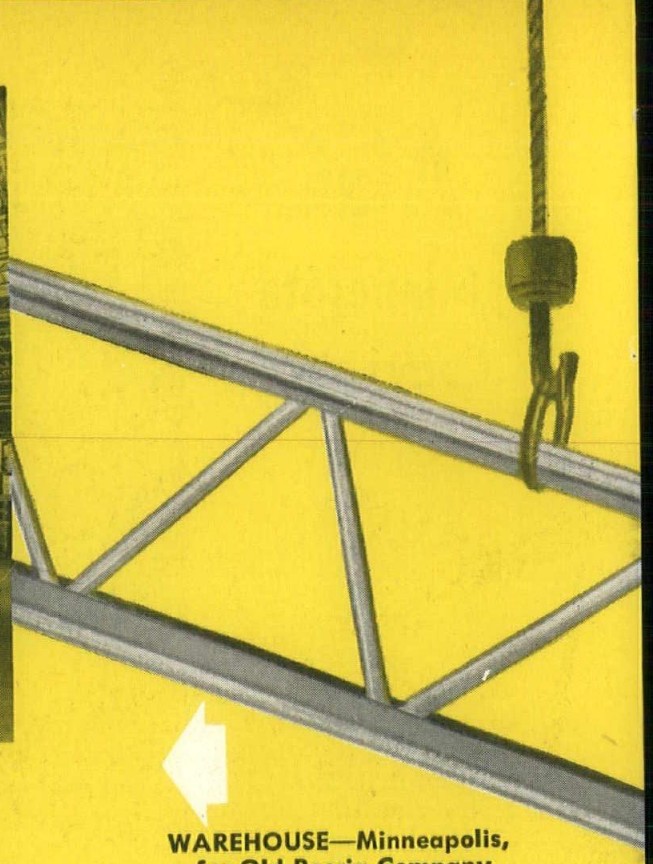
Speaking before a January meeting of the builders division of the Associated General Contractors of Minnesota, Roy N. Thorshov, well known Minneapolis architect and senior member of the firm of Thorshov & Cerny, made some notable points about the relationships of architects and the builders who put into actuality the designs of the architects. We print his remarks below.

I think it is almost presumptuous that a member of our profession should come to address you but we have many problems in common, which, if successfully solved, bring credit to both of us and also leave a well-satisfied client. Both the contractor and architect continue to have work as a result of someone's need. If we can successfully solve his needs for the professional help we can give and leave him well-satisfied we have created one of the best advertisements for our services. We all want to continue the privilege of our chosen professions and satisfied clients will certainly help us do so.

Our office has many men who joined its staff from all over the country. They have witnessed the construction industry in all its many phases. It is a wonderful feeling of satisfaction to hear the reputation that this part of the United States enjoys because of the quality of craftsmanship and business administration carried on by the construction industry here. You men

(Continued on Page 45)





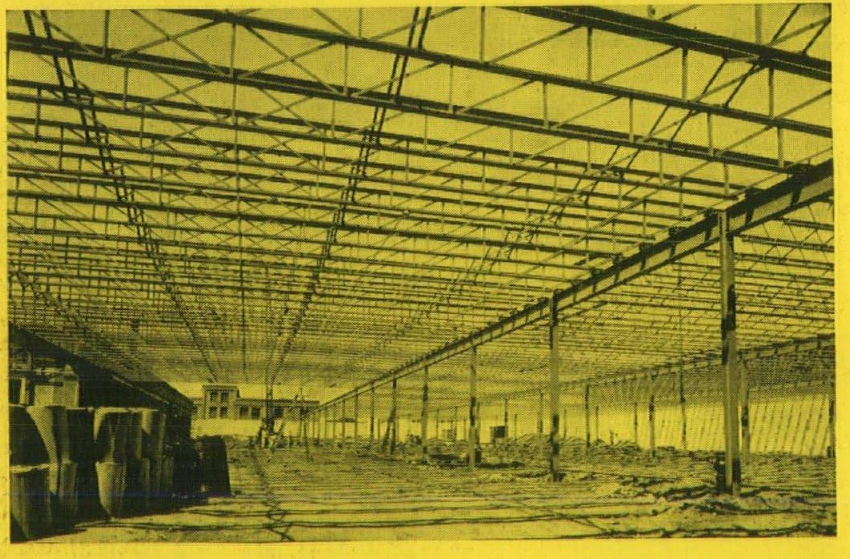
WAREHOUSE—Minneapolis, for Old Peoria Company

contractor: Adolfson & Peterson

architect: Saul C. Smiley

erector: Waylander & Peterson

Pacal supplied: standard and longspan open web joists, structural and reinforcing steel, steel roof deck.



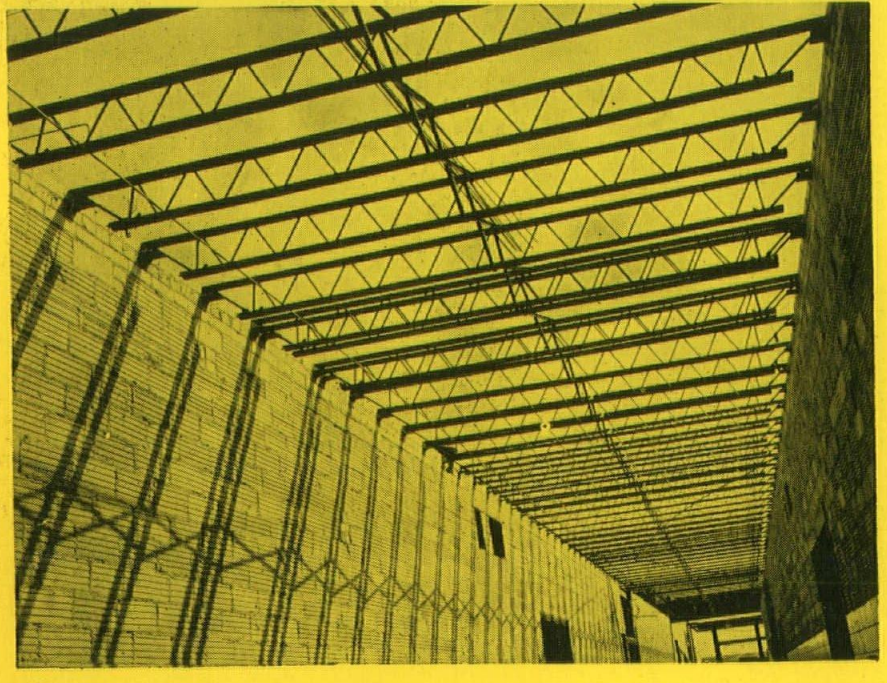
BUS GARAGE—St. Paul for Twin City Rapid Transit Co.

contractor: Ring Construction Corp.

architect: Loren B. Abbett

erector: Waylander & Peterson

pacal supplied: longspan and standard joists.



SCHOOL—Kenyon, Minnesota

contractor: Dean Contracting Company

architect: E. D. Corwin & Associates

erector: Holman Erection Company

Pacal supplied: standard and longspan open web joists, structural and reinforcing steel.

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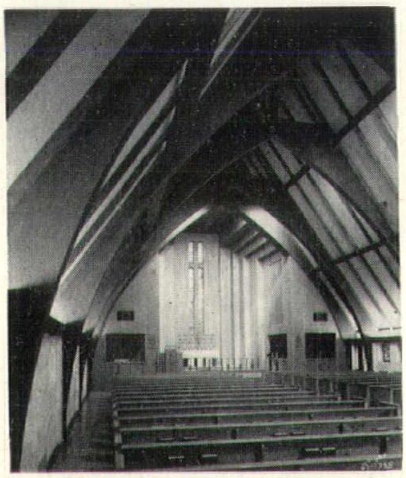


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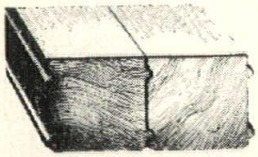
Nave of Mt. Olive Evangelical Church, St. Paul, Minn., utilizes decorative UNIT laminated arches of Gothic design. Architect—Bard and Vanderbilt.

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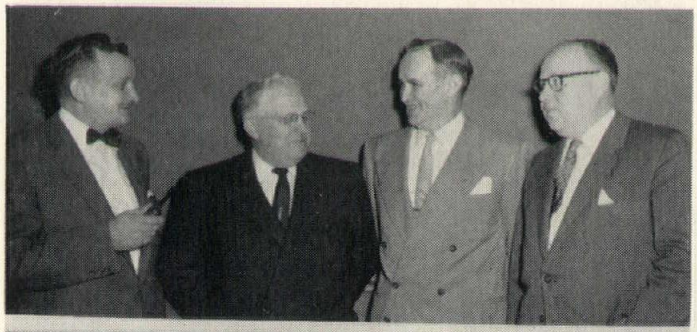
are recognized throughout the country and the world because of your leadership and the quality of work you do. This recognition is richly deserved. In spite of this, none of us wants to rest on our laurels but we want to see where we can improve and increase the proficiency and quality of our work.

My talk today is on what the architect expects from the contractor. Although this is only one phase of the construction industry, I want you to know that the architect also realizes that the contractor expects the architect to be well qualified as to ability and execution of his phase of the work. Some of us have sat down with many of you at times to see how we could improve our phase of the work and we will continue to do so. We will appreciate very much your pointing out to us our shortcomings and how the improvement of our work can aid you in your work. In a very genuine and constructive spirit I have chosen to be critical of certain attitudes and practices existent in isolated cases in the construction industry which point out in reverse what we as architects would desire of the contractor.

This talk today is not to criticize the construction industry as a whole but to bring to your attention items along the whole path of construction where there might be improvement to make a better end result. This is not in the nature of a general criticism but it is understandable that each of us at certain points may have weaknesses which, if brought to our attention, can ease the whole operation of the construction industry. Although you men are general contractors, these remarks hold equally well in all cases where there are individual contracts for mechanical or electrical phases of the work.

Let me start with a rather nebulous expectation, one

More AGC



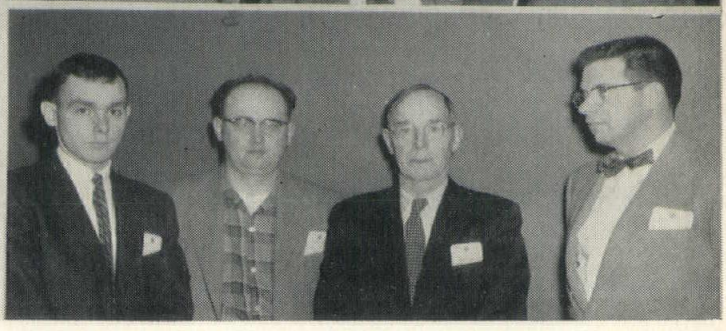










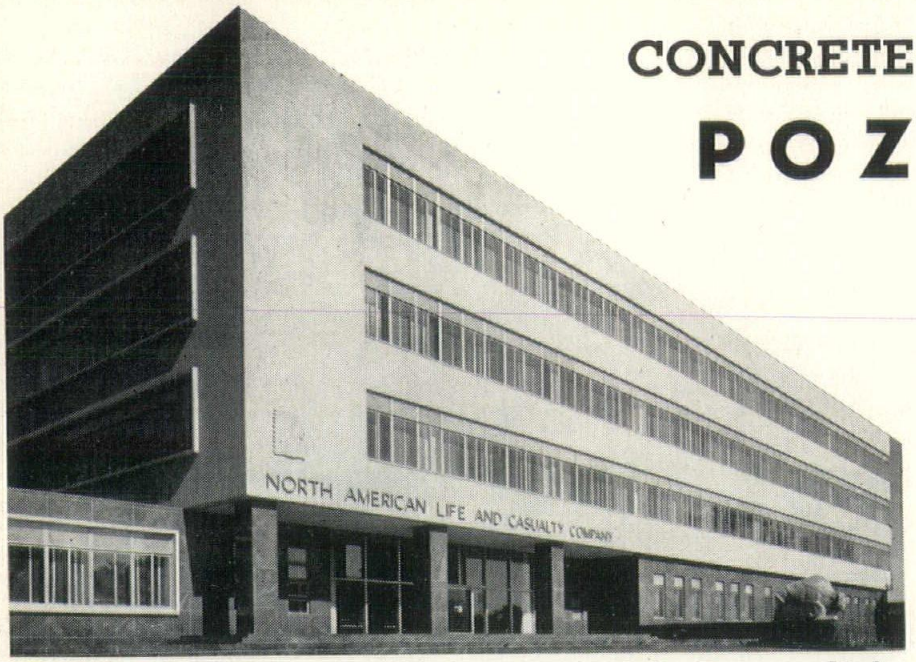


AGC scenes taken by our photographer shown here include (row by row, left to right)—L. C. Halverson, R. N. Thorshov, Richard Steenberg and K. O. Johnson, convention chairman.

W. C. Budge, Jr., Carl Lebeck and Joseph Veranth —Dean M. Schweickhard, Richard Steenberg and C. H. Bingham.

A. P. Fisher, R. J. Hendershott and P. McDougall —Lyndon Dean, H. S. Chapin and Otto J. Eickhof. O. R. Anderberg, Sr., O. R. Anderberg, Jr., and Don Magnuson—J. H. Wagner, M. R. Sundholm, Nick Wagner and T. A. Engelen.

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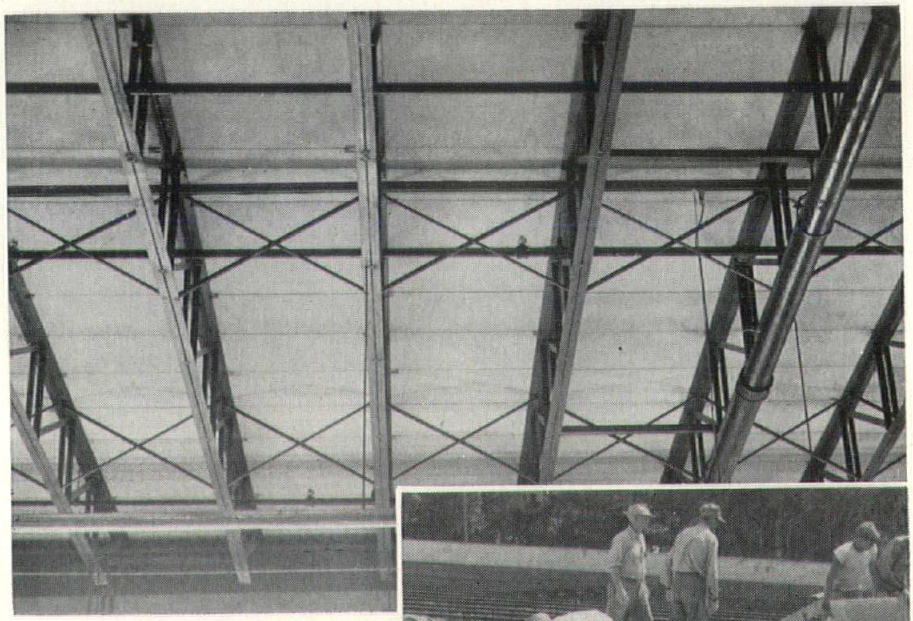
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difficult to define and which can certainly vary from job to job. Architects, as much as any other professional people have a tremendous pride in their work. All buildings emanate from the creative work and abilities of such a person. Not only have many hours of creative effort been expended but invariably much time has been spent with the client in understanding his problem and explaining the solution which you as contractors will erect as a structure. We do not appreciate any self-appointed expert who attempts to redesign our buildings any more than you enjoy the well meant opinions of your "sidewalk superintendents."

We do appreciate constructive comments and I'm sure you'll always find the architect ready and willing to listen but we do prefer to have them made directly to us, not to the owner. I'm sure you all appreciate the demoralizing effect on an owner when two divergent opinions are expressed.

Client Is Architect's Job

With this comes the phase of client relationship. At the inception of a job the client is the client of the architect. During the construction, the client is the client of both the architect and the contractor but the line of command and control between the contractor and the owner is through the architect and, in order to achieve a good end result, it is necessary that good public relations exist among all three parties throughout the job. This is a natural sequence of events in 99 per cent of all projects but once in a while a job may go a little sour because a contractor, instead of dealing through the architect, will attempt to deal directly with the client and circumvent the architect.

Another thing the architect appreciates is a good business administration of his project by the contractor. This means writing all necessary letters. When shop drawings are submitted, they should be submitted with a letter of transmittal. This will settle without argument date of submission and return as the architect, in turn, must use a letter of transmittal. We do not appreciate, even though it sometimes expedites the work, to have sub-contractors come to the office and leave at the counter with the receptionist a series of shop drawings for checking but no letter of transmittal. Specifications call for shop drawings by all sub-contractors to be routed through the general contractor to the architect. It is also required of, and expected, that the contractor, even if through his sub-contractor, will go out to the job and check job measurements. I think you are all aware that the architect's stamp of approval on the shop drawings is for detail and not for job measurements.

When it is requested that certain information be furnished on specified forms, this should be done. This is especially true in regard to change orders.

In preparing your bids and also throughout the process of construction, there are two sections of the specifications which must be adhered to and referred to but which are often ignored. These are Section 1, which generally consists of the American Institute of Architects' Standard Conditions, Articles 1 to 44, and Section 2, the Supplement to Section 1. These are also binding on all subcontractors and it would be well to reiterate to each sub-contractor that he must consider these sections when he submits his sub-bid to you.

One of these architects within these sections calls for the bringing to the attention of the architect prior to bidding any discrepancies or irregularities in the plans or specifications so that the necessary addenda can be sent to all contractors prior to bid date so that all will be equally aware of any discrepancy. Theoretically the plans and specifications should be perfect. You, as well as I, know this is impossible and we are all trying to do a job and to get as close to that perfection as possible but we do need assistance both ways. Too often this is brought up after bidding with considerable difficulty encountered by all parties.

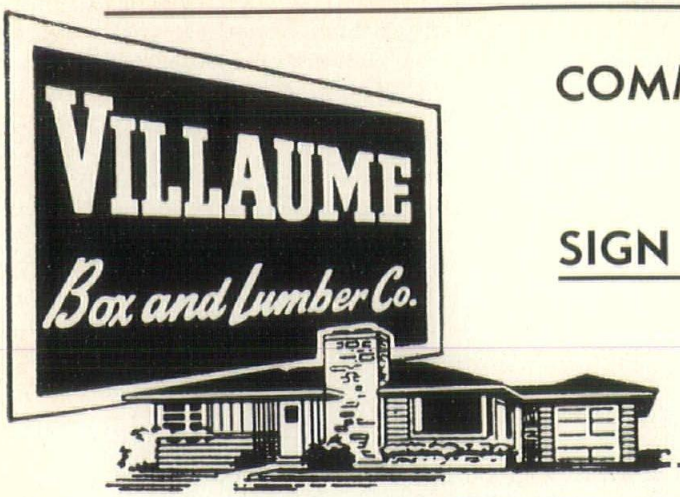
One of the items we seem to have the most difficulty with in the General Conditions, Articles 1 and 2, is the matter of insurance certificates. This has been a matter that has been thoroughly discussed by the joint committee of the AGC-AIA and certain standards have been set up as to what should be required on any job. It is surprising the amount of correspondence that is necessary to get the proper insurance certificates that cover the amount of insurance to be required within a specification and as set up by this joint committee. So often certificates must be returned because either the proper parties are not named or the insurance is not in accordance with the amount specified.

Now there are many general items to discuss for good job relationships. One of them is the matter of superintendence on a job. One source of irritation is the continued change of superintendents on a job. It is only logical that for the contractor to make money and to do a good job it is advisable that he has the most competent superintendent on the job and that, once he assigns him to that job, he keeps him on that job. We have had many cases where there have been two or three superintendents on a job and it is impossible for a continuity of job procedures where this occurs. The owner also becomes very disturbed.

Keep Plans and Spex Balanced

There is probably one other item I should have mentioned when we talked about Articles 1 and 2 of the specifications and that is the balance of the specification as well as the plans. They should be studied very carefully. So often, when a job is well under way, a sub-contractor will call and ask a question. We look it up in a specification, find that it is covered and advise him of the pertinent paragraph. Too often they neglect to read everything pertinent to their phase of the work. Need more be said?

At the start of a job one of the first things that is asked for is a list of the sub-contractors so that they can be properly approved. It expedites the work greatly if this can be done quickly so that, should there be some sub-contractor who is not approved, adequate steps can be made to correct the situation. This brings into sharp focus the practice of the contractor during bidding. One finds out whether or not the contractor has been critical when he evaluated his sub-bids prior to bidding. You all are aware of the sub-contractors who you know are good who can furnish the job as specified and who will do an adequate job. Too often marginal sub-contractors are submitted on the lists for approval



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even though they may be quoting a material that does not meet the specification or for which no approval has been secured from the architect. We have even had instances where someone has submitted the name of a sub-contractor who has not yet gone into production on a specific item. Naturally such a sub-contractor would be disapproved.

The submission of the list of sub-contractors also brings up the question of shopping with sub-contractors after the low bids have been disclosed. We don't like it. I think most of you do not like it and it is unfair to the sub-contractors. It is one of the phases of the construction industry that has brought criticism and is probably responsible in great part for the fact that separate bids are now taken on certain major parts of the work. This is a phase that we cannot police or have no desire to do so. It is the phase of the construction industry that lies within your province and is also dependent upon the integrity of your sub-contractors. Of course your sub-contractors are not going to be willing to chisel each other unless you are willing to accept the results. We do not like, and we do not appreciate it when a contractor comes to us when he has been awarded a contract because he bid low and then says that John Doe, who has been rejected by the architect, gave him such a low bid on such and such a sub-contract, that if he takes his next higher sub-contract bidder it will cost him money. It is your responsibility to only accept bids from sub-contractors who meet the standards set up in the specifications.

Another item which occasionally brings problems in construction, especially when there is a schedule to be met for completion, is the failure to order materials ahead of time so that delivery can be assured. Failure to order material generally indicates bid-shopping after the award of contract.

Again I want to reiterate that in this discussion of what the architect expects from the contractor I am not trying to give any over-all broad criticism of the contracting profession. I am trying to pick up these minor points that occur individually in isolated cases and which, most often, are a source of irritation and which do not contribute to a good end-result in construction so that we can all be aware of them and watch out so that on occasion they do not occur to us.

Pay Isn't Petty Thing!

All of us like to get paid on time. Occasionally, and we are glad that it is very seldom, a sub-contractor will call us and wonder why he has not received any money on a project, although the contractor has been paid money on the specific item. The specifications are very clear that all sub-contractors are to be paid in proportion to their work the amount the general contractor has received to date on that work and that such payment is generally due within five days of receipt of same by the contractor. When a situation like this arises, we will call in the general contractor, talk it over with him and try to arrive at a satisfactory solution. If it continues our only recourse then is to write the bonding company and advise them of the situation.

Another thing that helps to make a job run smoothly in good co-operation between several prime contractors when a job is bid in that manner. It is to the common good and cost advantage of each that the electrician, the mechanical contractor and the general contractor co-operate. We have found that sometimes it is to the mutual advantage to arrange regular scheduled meetings, probably once a month, of all prime contractors to discuss progress of the work and the methods of co-operation with each other.

From time to time on almost any job it is necessary to make changes and to secure costs on such changes. It helps a great deal with the owners when such changes occur that the estimates are fair and that they are in detail. It is much easier to be able to justify to an owner a change order properly submitted and properly detailed with full explanations of costs than when one comes to an owner and tells him that such and such a change will cost a lump sum of so many dollars. When requests are made for costs on such change orders they should be handled expeditiously so that information can be transmitted without delay to the owner, as he is cognizant of the change at the time such a change order is requested. If the information comes to him two months later, his mind is vague as to all of the details and sometimes it takes a great deal of explaining to justify costs.

Comes the Completion Date

All jobs eventually come to a completion date and at that time there are generally several minor items to be corrected or completed. One of the finest methods of client relationships is to take care of the final clean-up of these minor items in the shortest time possible. You may have a two million dollar contract for a project and if the last thousand dollars worth of items drags on for two or three months the owner will often forget all of the good things you did and gripe about some of the minor details. If the architect is slow in getting his punch list out, don't hesitate about putting the pressure on him.

Although this is a minor item, and I probably should have mentioned it earlier, one thing we would appreciate would be the proper protection of material on the job site. Too often materials are not properly protected from the elements so that damage occurs to them prior to their inclusion in the work. A clean and orderly project throughout is very desirable. Nothing impresses an owner as much as good housekeeping, efficient workmanship and reasonably rapid construction.

An occurrence that would be very flattering, and liked by all architects, is the receipt of bids that come below the estimate of the architect. We generally try to be wise enough to get preliminary estimates from you men in the early stages of the preparation of the drawings so that we can give a realistic picture to the owner but often the owner's ideas become a little grandiose during the preparation of plans and sometimes conditions within the economy of the country occur so as to cause an increase in costs, especially when the plan preparation goes over a long period of time. We like good bids that are reasonable but we do realize that any bid should be fair so that a contractor makes a

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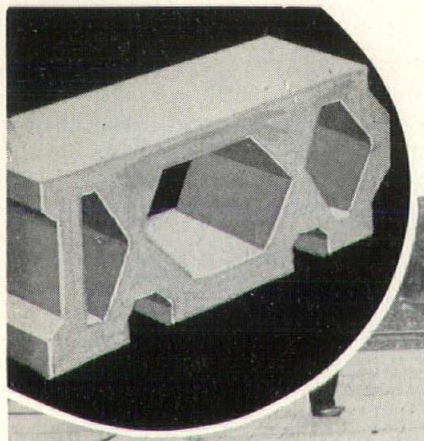
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reasonable profit. A job on which a man loses money is not a good job for anyone.

From time to time new methods and uses of materials are developed and I think very likely the architect is a pioneer in trying to get their use. We do appreciate an open mind and assistance by you men in trying to develop new technologies in buildings. Don't fight us and say it can't be done! Generally we work with some of you in the early stages in the preparation of drawings to see if it can be done. When the time for actual construction comes, help us see that it is achieved.

I think the thing for us all to remember is that we have a common interest in achieving a satisfied client and a good building. I think this is best accomplished by a continuation on the part of all of us to co-operate toward this common end as we have all done in the past. Certainly our relationships with you are extremely pleasant and edifying and the criticisms I have made represent a distinct minority in our total dealings. It is my sincere hope that we will continue this co-operation and that your asking me to appear here and my assumed freedom in choice of comments is indicative of a very healthy and desirable relationship between two very closely aligned professions.

HALDEMAN-HOMME ROUND 'EM UP FOR TENTH TIME

The tenth annual roundup held by Haldeman-Homme, Inc., St. Paul, was put on by that company recently for Twin City architects, contractors and others in the construction industry. Genial W. W. "Duke" Haldeman and Jack Homme were hosts to a host of building personalities, some of whom are shown in our pictures.

Shown are (left to right, starting with top picture):

Bob Towey, W. W. Haldeman and Roy Erickson.

Jack Homme, Kaye Jones and Loren Abbett.

W. W. Haldeman, Ralph Shiner, Edno Rich, Eileen Jacobson and Jack Loveless.

Gene Flynn and Ken Buetow.

George Townsend, Cliff Peterson, Gordon Matson and Charles Magney.

Arnold Hartwig and Ken Fullerton.

Wally Hanson and Clarence Nelson.

Art Nelson, Adeline Lindblom, Bob Pope and Bill Krueger.

Don Zafke, Harold Westin and Frank Scheiber.

Dave McEnary, Dwight Wilson, Bill Hartfield and Bob Van Hoe.



FLADLAND NEW TWIN CITIES WESTERN MINERAL REP

Clint C. Fladland has been named Twin Cities architectural representative for Western Mineral Products Co., Minneapolis vermiculite processors, Harvey W. Steiff, vice president, has announced. Mr. Fladland has been with the firm in Omaha for the past five years and was actively associated with the Nebraska Lath and Plaster Bureau.

A native of Forest Lake, Mr. Fladland is a graduate of the University of Minnesota in law and business administration and served as a fighter pilot with the Marine Corps during World War II. He is married, has three children and will make his home in Minneapolis.

UNIVERSITY of NORTH AMERICA

An Undergraduate Thesis Submitted in June, 1955, to the University of Minnesota's School of Architecture by

CARL R. NELSON, JR.
and
NORMAN D. DAY

PART TWO

3. Agricultural Complex

a. Central Classroom Building of approximately 40,000 sq. ft. This building will contain all of the necessary classroom and lecture space for the instruction of agriculture, agricultural engineering and forestry. An agricultural school bookstore, a library and college administrative and faculty offices will also be accommodated in this structure.

b. Plant Industries Area of approximately 8000 sq. ft. This area will include the laboratories for plant pathology, agronomy and soils.

c. Animal Industries Area of approximately 15,000 sq. ft. This area will include livestock labs for the study of hogs, cattle, sheep and horses. Meat and dairy processing labs will also necessarily be included. The dairy processing laboratory will process all of the dairy products to be used at the university.

d. The Poultry Building of approximately 15,000 sq. ft. The Poultry Building will include husbandry, nutrition, breeding and a poultry produce laboratory along with all the necessary brooding space. The building will by its nature contain much heating, lighting and ventilating equipment.

e. Forestry Building of approximately 12,000 sq. ft. The Forestry Building will include laboratories, class-





rooms and lecture rooms for the instruction of forest management, fish and wild life management, life conception and wood technology. Adjacent experimental fields and groves are essential.

f. Agricultural Engineering Shops of approximately 12,000 sq. ft. This area will include shops for the building trades, rural electrification, water supply and sewage, soil conservation and machinery shops.

g. Veterinarian Medicine Building of approximately 14,000 sq. ft. This building will include special animal basic science laboratories for animal anatomy, physiology, pathology, bacteriology, husbandry, disease control and food sanitation. Access to the range land barn and animal shelters is important. The necessary classrooms and lecture rooms, plus the faculty offices, will be included in this building.

h. Barns and Sheds which are adjacent to the experimental fields and range land.

Model, showing contours, roads and buildings before landscaping. U. S. Highway #16 is in left foreground and main road to museum (divided) in center foreground. Thunderhead Mountain, site of the Crazy Horse carving, is in center of picture. Statistics of model—200 large sheet boards, 221 contour intervals @ 5 feet, therefore total interval 1,105 feet, 7 gallons rubber cement, 3 pounds nails, 2 pounds foam rubber trees, one gallon paint sprayed on with airbrush, total cost of materials approximately $150, total man hours approximately 1,000, total size 40 x 60 inches or 2,400 square inches.

Closeup of academic buildings and student and faculty housing. Medical center is at top left, athletic facilities at top right. Thunderhead Mountain and non-denominational chapel are at right edge near center.

4. The Medical Science Complex

a. Central Classroom Building of approximately 55,000 sq. ft. This structure will contain all the classroom and lecture space necessary for the instruction of the basic courses in medicine, dentistry, medical technology, dental hygiene, pharmacy, nursing, public health and occupational therapy. The building must also include the college administrative suite, faculty offices, a medical bookstore and a bio-medical library.

b. The Basic Science Area of approximately 20,000 sq. ft. This area will include the following laboratories: gross anatomy, micro-anatomy, physiology, physiological chemistry, bacteriology, pharmacology and pathology. Additional space must also be provided for people doing research.

c. The Departmental Area of approximately 20,000 sq. ft. The departmental area will include the following eight facilities: a dental section with a general lab and special facilities, including showers and lockers for students; a pharmacy section; a dental hygiene section; a medical technology section; a public health section; a nursing section; a medical section and an occupational therapy section. All of the above sections will include a small additional administrative area and faculty offices.

THE MEDICAL CENTER

1. The Student Health Service of approximately 12,000 sq. ft. This area will include all of the out-patient and hospital beds necessary to maintain the health of the University students, faculty and the community that results from it.

2. The Dental Clinic of approximately 5,000 sq. ft. This area will include all of the out-patient facilities necessary for the instruction of dentistry.

3. The Hospital and Outpatient Clinic of approximately 100,000 sq. ft.

a. A 200-bed Hospital—this building will contain wards for both general and special surgery, obstetrics, gynecology and pediatrics as well as the general hospital facilities. There will be an ample number of conference rooms for students in each ward. The structure will also include hospital administration, quarters for both large and small animals, hospital services and laboratories and a garage. Special lecture rooms of varying sizes will also be included for both student and public use.

b. An Outpatient Clinic—this area will provide complete facilities for outpatients from outside the university area. This will be operated on a rather limited basis.

ATHLETIC FACILITIES

1. A football stadium for football, track and field, an arena seating approximately 15,000 people.

2. A basketball arena for basketball, gymnastics and wrestling seating approximately 7,000 people.

3. Outdoor baseball park seating approximately 5,000 people.

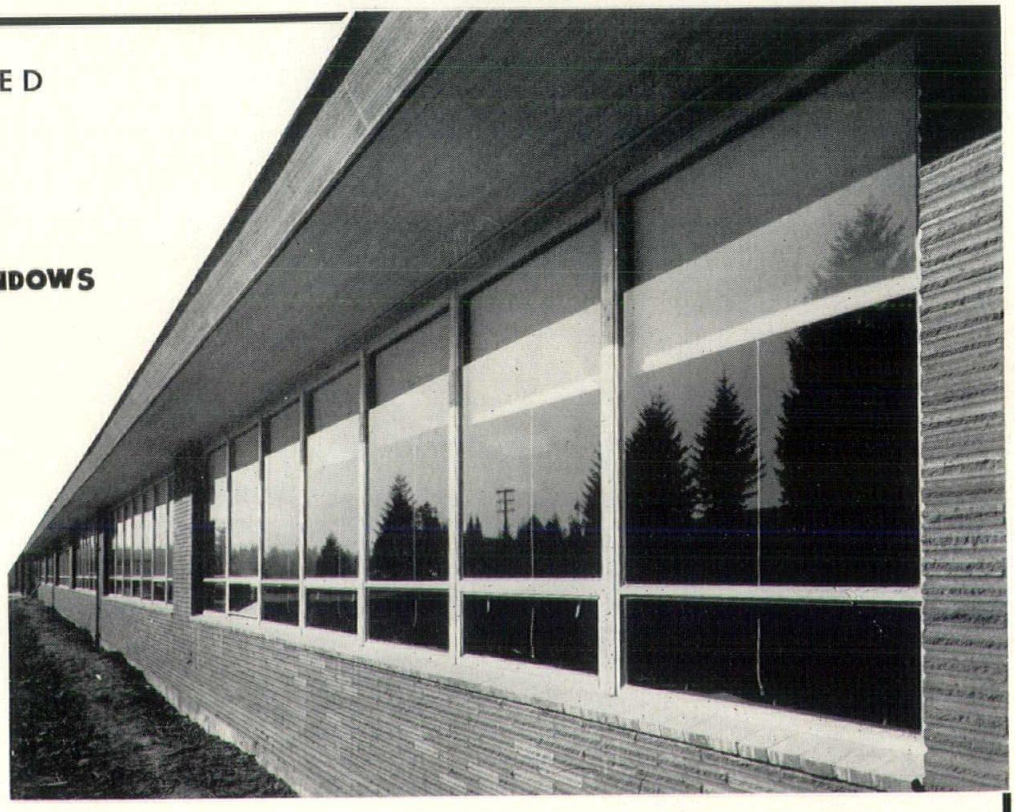
4. A softball field seating approximately 500 people.

5. Competition tennis courts, both hard surface and lawn, with a seating capacity of approximately 500 people.

6. Practice fields for all of the above, plus an archery range.

CUSTOM EXTRUDED

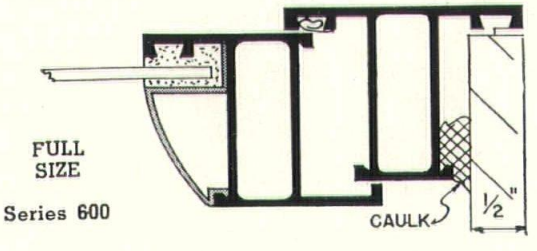
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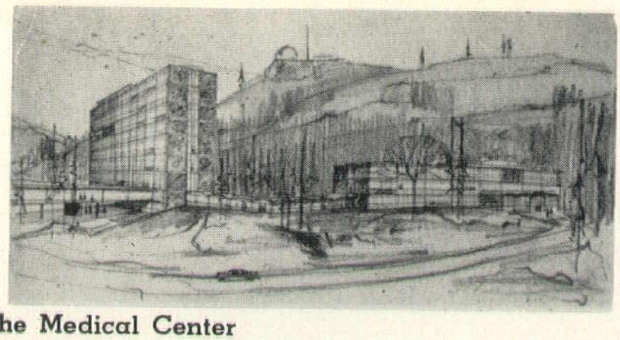


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The Medical Center

7. A physical Education Building of approximately 80,000 sq. ft. The physical education building will contain all of the classrooms, lecture halls, administrative space and faculty offices for the instruction of classes in the physical education department. The men's and women's wings of the Physical Education Building will each include locker and shower facilities and a swimming pool. The men's wing will include gymnasium facilities for basketball, handball, archery, wrestling, squash, fencing, badminton, volleyball, gymnastics and weight lifting. The women's wing will include facilities for basketball, archery, squash, fencing, badminton, volleyball and all types of dance instruction.

8. Indoor Practice Building of approximately 20,000 sq. ft. This will be a large indoor space of a flexible nature. It will be used for football, baseball, track, and field. Military students may also use the building for instruction in military drill during inclement weather.

SPECIAL PURPOSE BUILDINGS— STUDENT-PUBLIC USE

The university complex will need several special purpose buildings—other than those of an athletic nature—for use by the students and public for social, business and academic functions. Included in this group are the main auditorium, the theater-art gallery (part of the fine and commercial arts complex), the administration building, the library, the student union and faculty-alumni club, a religious center, including a non-denominational chapel, and the military building. The service building complex may be considered an eighth part of this group.

1. The Main Auditorium of approximately 50,000 sq. ft. The main auditorium will consist of a main hall with complete stage facilities for an audience of 2,500 persons. The building will contain all of the facilities such as ticket windows, coatrooms, offices, waiting spaces, etc., necessary to make it operate efficiently. It will be used for the university convocations and other special entertainment requiring a large auditorium.

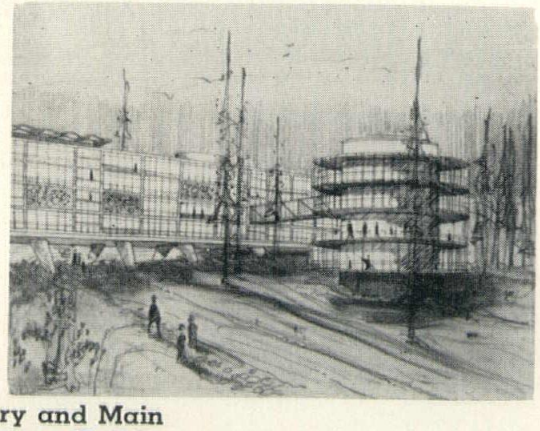
2. The Theater-Art Gallery of approximately 12,000 sq. ft. The theater-art gallery, possibly part of the fine arts center, will contain a theater auditorium to seat 400 people and the necessary facilities to put on a full-scale stage production. The art gallery must be of sufficient size and capacity to exhibit any traveling or university art show. Other facilities must include enough offices, storage space, etc., for the efficient operation of the gallery.

3. The Administration Building of approximately 25,000 sq. ft. This building will contain spaces for all administrative offices, offices for university officials and offices for the civil service section, post office, etc. It will also contain all physical plant facilities and enough storage space for the efficient maintenance of financial reports, registration records, and others.

4. The Library of approximately 60,000 sq. ft. The library will be of a sufficient size to accommodate 500,000 volumes in the stacks. The reference area will contain an additional 50,000 volumes. The stacks will include an ample number of carrells to accommodate the faculty and a graduate class. Space for periodicals must also be provided. In addition to the above a lobby-display area and a number of reading rooms will also be provided. Offices and administrative space, as well as a generous amount of circulation space, are required. In addition to the library space there will be a library storage space where rare and seldom-used books, letters, etc., can be stored. This area may be combined with a similar area required by the administrative department in one common facility. This area will need approximately 15,000 sq. ft.

5. The Student Union and Faculty-Alumni Club of approximately 25,000 sq. ft. This building will consist of meeting rooms, a ballroom, eating facilities, lounges, recreation areas and any other function deemed necessary to the successful operation of the facilities. The faculty-alumni portion of the unit will house a dining area, alumni offices, meeting rooms and rooms and suites for visiting faculty members.

6. The Religious Center of approximately 14,000 sq. ft. The religious center will contain complete facilities for each of six separate sects, each determining its own need. In addition to the above a non-denominational chapel would be provided for the minor sects and for special groups or individuals wishing to use such a building.



Library and Main Classroom Building

7. The Military Building of approximately 8,000 sq. ft. This building will contain classroom and laboratory space for the instruction of the various ROTC branches. Various garages and storage areas will be included. The building will be contiguous with the athletic facilities to allow joint use of both indoor and outdoor facilities.

8. The Service Building Complex of approximately 70,000 sq. ft. The service building complex will be divided into two parts, the utilities section and the



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maintenance section. The utilities section will include a nuclear reactor to be used for a source of heating power and the generation of radioactive isotopes for the medical center, an emergency electrical generator, all central controls for supply of water and gas and a sewage disposal plant. The maintenance will include an administrative area, a building and grounds area (including warehouse and garage facilities) and fire and police facilities sufficient to handle any type of an emergency.

THE TOURIST FUNCTIONS

The tourist functions of the university will consist of four separate attractions—the mountain carving of the Indian Crazy Horse, the Museum of the North American Indian, the sculptural tributes to the Indian chiefs and warriors and the trading post where Indian crafts and relics from all over the continent will be sold.

The mountain will be the largest piece of sculpture ever attempted by man. The 563-foot piece of sculpture depicts Chief Crazy Horse riding his horse into battle. It is estimated that it will take from 25 to 30 years to complete the carving. However, with the aid of a federal loan, the work could be completed in 12 to 15 years. Such a loan is now being considered.

The Museum of the North American Indian will be one of the most outstanding museums in the world. Many branches of science will be represented, including natural history, forestry, archaeology, biology, anthropology, botany, paleontology, zoology and any others which must be included to show the Indian in the true perspective of his original environment. The museum will consist of three portions, the exhibit space, the work space and the research space. It will have many permanent exhibits but a large amount of flexible exhibit space must be provided because of the tourist factor. This policy of changing the exhibits will mean that it is mandatory to have a large amount of storage space. A large staff serving a dual purpose—explaining the exhibits and teaching in the university—will be needed for the successful operation of the museum.

The circulation spaces in the museum will have to be very large to accommodate the large crowds which frequent the site in the tourist season. The arts and crafts work of the Indian students may be exhibited in conjunction with the museum but in sheltered outdoor areas where they will be seen by all. Some visual education will certainly be given to the students and probably to some of the tourists as well, necessitating some proximity to auditorium facilities.

It is presently contemplated that sculpture will adorn the road leading to the museum as well as the courtyards, etc., on the campus. These pieces of art will be placed in the area as a tribute to the great leaders of the Indian nations of the North American continent.

The trading post will be placed in close proximity to the museum. It will function as a place where talented Indian students can sell their own art and crafts to the tourists to assist the students in paying for their educations.

HOUSING

1. Student Dormitories of approximately 330,000 sq. ft. Dormitory facilities shall be provided for a total of 4,000 single students, male and female. Dining, laundry, recreation-lounge and postal facilities will be provided for all of the units.



Student Dormitory

2. Student Apartment Buildings of approximately 250,000 sq. ft. Apartment living facilities will be provided for a total of 2,000 married students on or very near the university site. Laundry facilities and possibly small commercial dining areas will be provided in these units.

3. Faculty Apartment Buildings of approximately 150,000 sq. ft. Apartment facilities similar to those provided for the students will be provided for a total of from 300 to 350 faculty members. Laundry facilities will again be provided.

4. Civil Service Employe Apartment Housing of approximately 80,000 sq. ft. These apartments would again be similar to the married students' apartment housing for a total of 200 employes.

5. Civil Service Employe Dormitory Housing approximately 20,000 sq. ft. These dormitories would be for the few employes of the University who are unmarried. All of the facilities that are provided in the student dorms will be provided.

FUNCTIONAL ANALYSIS

A. Objectives of the Master Plan

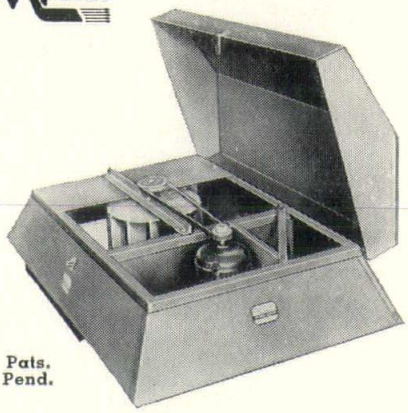
The objective of the master plan is to insure a planned environment for the future population of the university community. The plan is meant to combine the excellent amenities of the site with the functional relationships essential to ease of operation. The plan attempts the following:

1. Creation of a functional and symbolic center for the campus through site planning and functional groupings.
2. Integration of social, academic, public and housing elements.
3. Separation and control of tourist, medical and university traffic.
4. Exclusion of vehicular traffic except for service from the campus proper.
5. Provisions for future expansion.

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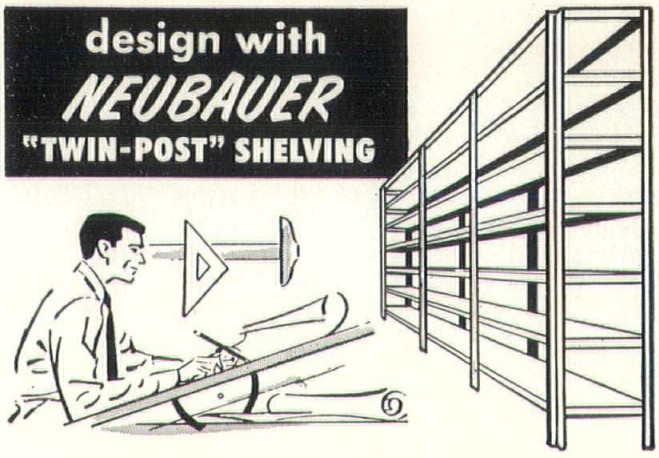
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The rendering above shows the layout of the proposed University of North America.

B. Relationship of the University Community to the Surrounding Area.

There will be two main access points to the development from U. S. Highway 16. The southern access, opposite the airfield, is the primary point of entry for the entire community. The secondary access to the north is essentially an exit for the tourists and a subordinate access to the university and its housing. Access to the development will be primarily by auto but the existence of the C. B. and Q. railroad and the inclusion of the light plane airfield in our master plan will provide secondary means.

Situated as it is, four and one half miles from Custer and surrounded by national forest on all sides, the university community need never fear encroachment by commercial interests but should remain as an uncrowded, isolated center of learning in a virgin setting as long as it exists. Future development would likely require a larger site, which would probably be acquired from the surrounding area.

C. Utilities

All utilities will follow a single master plan of utility tunnels and will be supplied as follows: water requirements will be supplied by natural springs and by impounding several streams on or near the site; sewage disposal for the academic complex will be accomplished by treatment in the service center; power requirements will be fulfilled by the Black Hills Power and Light Company's steam generating plant at Osage, Wyoming; heat will be supplied by a nuclear reactor heating plant in the service center and standby facilities will be included; fire and police protection for the entire development will be provided, with garages and offices in the service center; building and grounds services will be housed in the service center along with all the necessary warehousing for the entire community.

D. Campus and Building Relationships

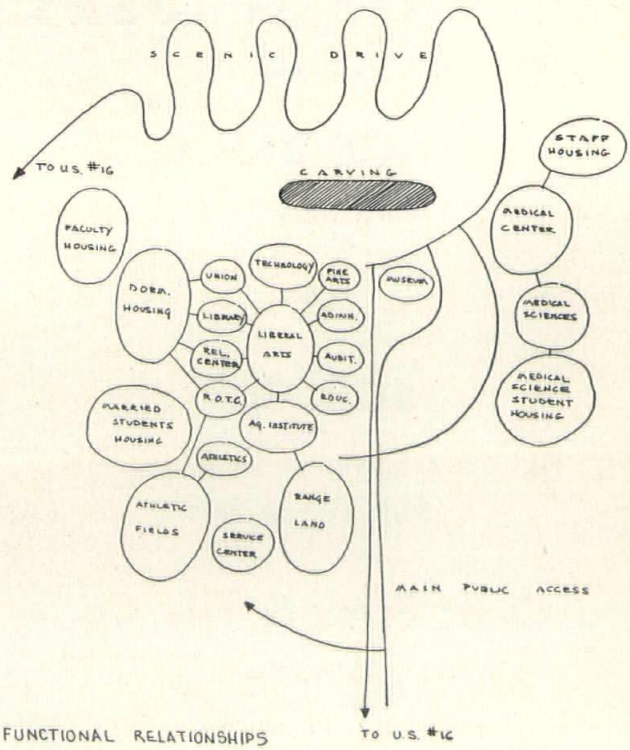
An attempt is made to separate public and university traffic by concentrating the tourist and medical facilities to the right of the major access road and all the university, service and housing elements to the left or north of the road.

The medical center is so situated so to take maximum advantage of the view of the carving and the artificial lake at the foot of the carving. This location is the most sheltered area on the site that still enjoys good orientation and view.

The museum is placed on the edge of the artificial lake about 900 feet from the mountain carving. So situated on a natural rock outcropping as to be directly in front of and 500 feet below the sculpture, the museum will include a large outdoor gallery which takes advantage of the view.

The university is situated to the left of the main access road, covering the area from the foot of the mountain to the beginning of Dead Man's Gulch. The university athletics, ROTC, service center and range land are contiguous to the southwest and are easily accessible to the main road. All the housing for single and married students and faculty members lies directly to the north of the academic complex.

The accompanying diagram shows the functional relationships of the many elements of the entire community.



Study of this chart, in conjunction with the drawing above, indicates the grouping thoughts behind the plan.

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PC Throws a Party!

One of the biggest architectural social events of the year was the annual Holiday Party given by the Minnesota-Dakota Chapter of the Producers' Council in the Prom Ballroom in St. Paul.

Twin City architects and their associates were the guests of the group and the largest attendance in the history of the annual event was chalked up. Dinner followed a social hour and 200 turkeys were awarded to those holding lucky numbers.

Among the many who attended are those shown on the opposite page and the page following. Our identifications are left to right, row by row, starting at the top and show:

Joe Jester, PC president, and R. V. McCann, president of the Minneapolis AIA Chapter—Ray Thibodeau and Bill Meyer of the St. Paul and Minneapolis Builders' Exchanges, Bob Asbach, St. Paul Builders' Exchange president, Joe Jester, Loyd Peterson and T. Sanford of the Lathing and Plastering Association.

Ralph Keyes, executive secretary of the Minnesota Society of Architects, Paul Haugen, Al Larson and Bob Olson—Al Hammerstrom, Hal Fridlund, Gene King and Jim Coulter.

Bill Rabe, Rollin Child, Harold Weymann, Vern Larson, Art Larned and C. L. Bell—Bob Schlafle, Gene Yakas, Jack Homme, Bert Powers and Don Drews.

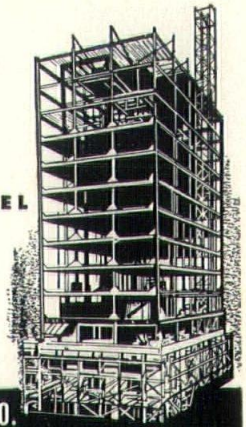
Louis Angelikis, Dwight Nelson, John Damberg and Curt Johnson, PC past president—Will Hamilton, C. E. Sparrow, Jack Borgman and Dick Peterson.

George Carter and Larry Hall—Red Homuth, Bill Olson, Cecil Tammen, Gordon Schlichting and Bill Rabe.

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More PC . . .

Additional PC party pictures show:

Bill Bielke, George Melcher, John Anderson and James Hills—Carl Fogelberg, Vern Watten, Erik Langdalen and Jack Hustad.

M. E. LaCroix, Howard Johnson, Doug Dunsheath and Loren Abbett—Sam Dittenhoefer, A. E. Tichich, Jim Baird and Frank Kerr.

Six Benson, Charles Anderson, Virg Siddens, Jim Garlbaith and C. Martinson—George Gohlke, Gordon Matson, Norman Knafla, Con Aas, S. M. Ackerberg and Ray Woods.

Gordon Oschwald, Horace Matson, Al Wegbetyn and Bob Anderson—Howard Page, Max Oftedal, L. D. Freedland, Jim Horne, Dave Darrel and H. A. Magoon.

Ron Gridley, Ver Stelmach, Russ Johnson, Omer Korshus, Vern Nelson, Vern Peck, Mass Matsumoto and Bob Reid—Duke Johnson, Larry Meyerhoff, Jim Gallea, Ron Gridley and L. D. Freedland.

Al Fischer, Ed Willainen, Frank Johnson and R. F. Palmer—Austin Lange and Cap Sanders.

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BLUE PRINTS





Fire Ratings Presented at Western Mineral Meeting

Pictures reproduced here were taken during the Western Mineral meeting and show (row by row, left to right):

Harvey W. Steiff, vice-president; L. J. Venard, president; F. E. Homuth, district sales manager; C. A. Pratt, vice-president—R. H. Rodlun, advertising manager, Minneapolis; Glenn J. Carpenter, Detroit Lakes, Minn.; Clint C. Fladland, new architectural representative, Twin Cities; Stan K. Kerr, Sioux Falls, S. D.

J. W. Tripp, Madison, Wis.; A. W. Lind, Green Bay, Wis.; John J. Myers, vice-president, Zonolite Co., Libby, Mont.; Harvey W. Steiff, vice-president, Western Mineral Products Co.; Homer Carlson, special plaster representative—Jerry J. Mercil, St. Cloud, Minn.; Walter J. Bein, vice-president, Zonolite Co., Chicago; C. A. Pratt, vice-president, Western Mineral; Vern J. Loberg, Mankato, Minn.

Ken Johnson, Milwaukee, Wis.; Dr. O. H. Johnson, Omaha, Neb., holding vermiculite ore; Robert F. Chadwick, manager, roof deck applicating division; L. J. Venard, president—Dale Moll, engineering department; F. E. Homuth, district sales manager; Max F. Corso, production manager; Duane G. Gehring, Eau Claire, Wis.

Recent official fire ratings established for vermiculite were discussed at a sales meeting of Western Mineral Products Co., Minneapolis vermiculite processors. The session was held January 16 in the Nicollet Hotel under the direction of F. E. Homuth, district sales manager.

Discussing two ratings of special interest to architects, Harvey W. Steiff, vice-president, said:

"Unquestionably the four-hour rating for a half-inch thickness of vermiculite acoustical plastic, machine-applied directly to corrugated steel, will enable architects to effect large economies in ceiling fireproofing and sound conditioning. This promises to be a popular type of treatment, since only one material and no lathing or furring are involved. One of the largest jobs in the nation is getting underway in Nebraska, using this method.

"A five-hour rating issued to machine-applied vermiculite concrete panel or spandrel walls places the material in a class by itself, fire-wise. The highest previous rating for any material had been four hours. This is fast, economical construction and not necessarily confined to skyscrapers. It can be profitably used in small buildings, as was demonstrated in an addition to a school in southern Minnesota recently."

Homuth discussed two-inch solid plaster partitions and said that an architect for a new Colorado college dormitory gained 24 additional rooms by using such

partitions instead of masonry.

Other speakers included Homer Carlson, special plaster representative, Ralph Rodlun, advertising manager, and Dale Moll, engineering department. Walter J. Bein, vice-president of Zonolite Co., Chicago, John Myers, vice-president, Zonolite Co., Libby, Mont., and Dr. O. H. Johnson of Omaha were guests at dinner in the Hennepin Room.

NEW OFFICERS OF MINNEAPOLIS BUILDERS' EXCHANGE INSTALLED

The 1956 officers of the Minneapolis Builders' Exchange were installed during the group's annual banquet on February 9 in Minneapolis. S. M. Olson, president of the C. W. Olson Mfg. Co., is 1956 president.

Other officers installed were First Vice-president Roy A. Bertelsen, vice-president and treasurer of the Minneapolis Builders' Supply Co., Second Vice-president M. E. Nordstrom, president of Cowin & Co., Inc., Treasurer Eugene F. Griswold, president of Cobb-Strecker, Griswold, Inc., and Secretary William J. Meyer, who is also general manager of the exchange.

The NORTHWEST ARCHITECT's photographer was present and took the pictures at the right. We identify those shown from left to right in each picture, starting with the top picture. They are:

William J. Meyer, Minneapolis exchange general manager, S. M. Olson, president, and M. E. Nordstrom, vice-president.

John R. McFarlane, past president, Glynne W. Shifflet, president of the Minnesota Society of Architects, and S. M. Olson.

William J. Meyer, general manager, Ray Thibodeaux, secretary of the Builders' Exchange of St. Paul, and Eugene R. Lambert, manager of the Duluth Builders' Exchange.

John R. McFarlane, past president, Lyell C. Halverson, president of the Minnesota Chapter of the Associated General Contractors, and Theo R. Hidding, Minneapolis exchange director.

Glynne W. Shifflet, president of the Minnesota Society of Architects, J. M. Beckstrom of the E. J. Beckstrom Co., Austin H. Lange, secretary of the Minneapolis AIA chapter, and John R. McFarlane.

William F. Poppenberger, vice-president of the Builders' Exchange of St. Paul, John E. Ganley, Minneapolis director, and Ray A. Porter, Minneapolis past president.

J. H. Jester, president of the Minnesota-Dakotas chapter of the Producers' Council, Douglas Dunsheath, Minneapolis director, Austin H. Lange, secretary of Minneapolis AIA, and Thomas Sanberg, executive assistant of Minnesota AGC chapter.

Vern Larson, member of the banquet committee, W. E. Neal, Minneapolis director, and W. C. Gilger, Minneapolis director.

Herb Klippen and Gordon Adams, Duluth exchange directors, R. V. Hood, Duluth exchange vice-president, and Henry A. Lambert, Minneapolis director.



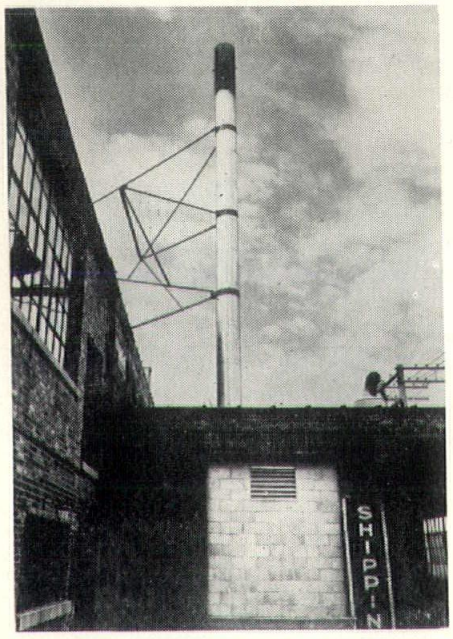
PRODUCTS and SERVICES

Cross Section of What's NEW

VAN-PACKER PRE-CAST INSULATED STACK NOW AVAILABLE IN SIX DIAMETERS, MAC ARTHUR SAYS

The Van-Packer Pre-Cast Insulated Stack is now available in a complete range of six sizes from 10″ I.D. to 24″ I.D. for wider industrial and commercial application, according to the manufacturer, Van-Packer Corporation, Bettendorf, Iowa. The line is handled in this area by the MacArthur Co., 936 Raymond Ave., St. Paul 14.

The Van-Packer is an all-fuel, refractory stack for use with boilers, furnaces, ovens, retorts and incinerators where flue gas temperatures do not exceed 1600° F. for continuous exposure.



"Because it is factory-produced, the cost of the Van-Packer Stack is about two-thirds less than a comparable brick stack and about the same as a comparable steel stack," according to the manufacturer. "The Van-Packer gives greater draft and lasts about three times longer than a steel stack."

The Van-Packer Stack is made up of 3-foot-long sections cemented one on top of the other with acid-proof, high-temperature joint cement. Each section consists of a vermiculite concrete insulating wall and an aluminum outer jacket which eliminates maintenance and painting. Section joints are made tight by aluminum joint bands. The stack can be used as an inside or outside chimney.

NEW AIR ENTRAINER INFORMATION RELEASED BY NORTH CENTRAL SUPPLY

North Central Supply Company has announced release of a new brochure on DAREX *AEA*. DAREX *AEA* is a chemically engineered liquid air entraining additive manufactured by Dewey and Almy Chemical Company, Cambridge, Mass.

This brochure gives the background and history of air entrainment in concrete as well as the current uses and advantages of DAREX *AEA* in all types of concrete for every construction purpose. Also included is a section on the adjustment of mixes and the methods of determining the amount of entrained air in concrete at the job site. A complete Dewey & Almy technical file is available by writing to North Central Supply Company, 1000 Raymond Ave., St. Paul 14, Minn.

GARDNER HANDLES FABROW ROTO-VENTILATORS

Appointment of Gardner Hardware Company, Minneapolis, as exclusive distributors in this area for the Fabrow Window Walls Frames and Fabrow Roto-ventilators has been announced by company vice-president John J. Healy.

"The addition of these outstanding products, developed by Fabrow Manufacturing Company of Toledo, Ohio, is another step in the expansion of our services to the building industries," Mr. Healy said.

GENERAL CONTROLS REPORTS "DUAL SAFE" SYSTEM

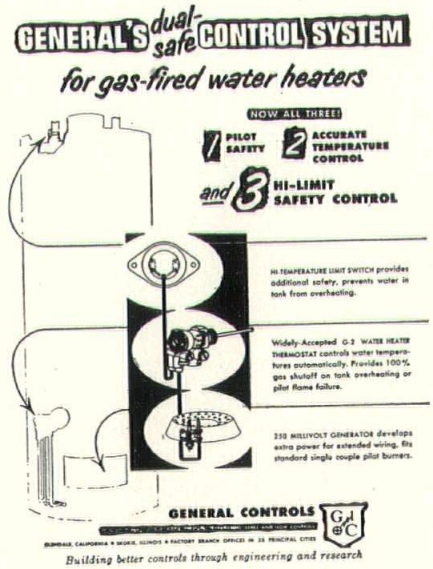
Three all-important control factors are embodied in the new General Controls "Dual Safe" system for gas-fired water heaters to provide automatic temperature control and 100 per cent safety shutoff of all gas in the event of pilot failure or any other unsafe condition.

The new system features:

1. A high-temperature limit switch, as shown in the top drawing, which prevents overheating.

2. The G-2 water heater thermostat control, as shown in the middle drawing, which automatically determines the water temperature and, additionally, provides 100 per cent gas shutoff if tank overheats or pilot flame fails.

3. A 250-millivolt generator, as shown in the bottom drawing, which holds the pilot safety valve open with power generated from the heat of pilot flame. If the flame should



fail, the heat-powered generator will be unable to provide the power required to keep the 100 per cent safety valve open and it will close automatically and shut off the gas.

MULTI-CLEAN ANNOUNCES PERMANENT COLOR FINISHES FOR OLD, NEW CONCRETE

A new, easy way to add permanent non-fading color to your concrete floors and eliminate concrete dusting forever has been announced by Multi-Clean Products, Inc., of



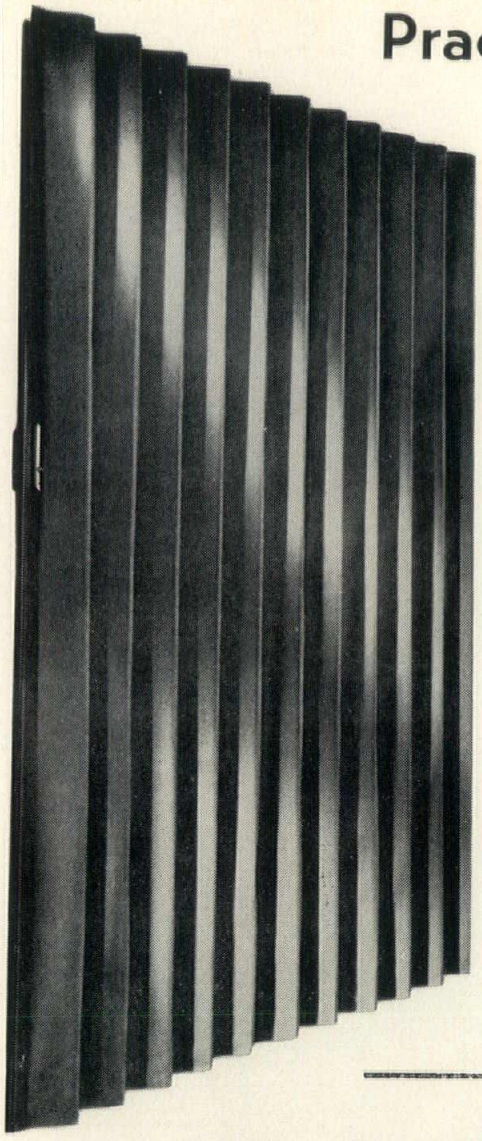
St. Paul, Minn., manufacturers of Kwik-Color Seal and Kwik-Color Wax.

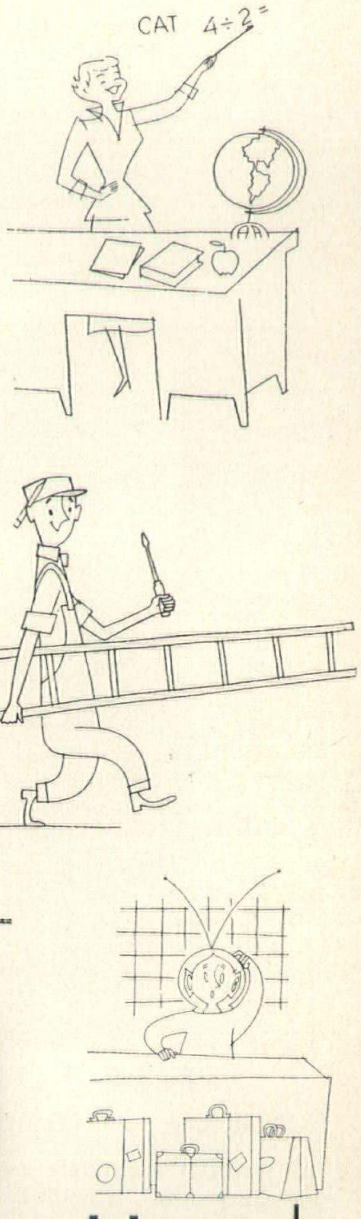
The products are designed to be used in conjunction with each other and are equally effective on old or new concrete. After the floor has been cleaned and etched with a good concrete hardener and etcher, Kwik-Color Seal is applied. Formulated from an emulsified plastic resin, Kwik-Color Seal is said to eliminate dusting, make cleaning easier and beautify the floor. It is odorless, non-inflammable, easy to apply and dries hard to the touch in 20 minutes.

Kwik-Color Seal develops excellent water resistance in about 14 to 20 days after application, says the manufacturer. To protect Kwik-Color Seal against water during this short "curing" interval, Kwik-Color Wax is applied. This is a high-grade waterproof emulsion wax containing colored emulsified plastic resin. It gives a high gloss finish over the seal and further protects and beautifies the floor. Also fast drying, it is said floors are back in service within two hours after etching, sealing and waxing.

Both are available in the tile red and light gray. The seal covers approximately 800 sq. ft. per gal., and the wax about 1000 sq. ft. per gal. For further information, write the manufacturer.

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FRISK ELECTED MASON CITY BRICK AND TILE PRESIDENT

A. C. "Cec" Frisk was elected president of the Mason City Brick and Tile Company at the annual meeting of the board of directors held January 17. Mr. Frisk succeeds W. J. Goodwin, Sr., of Des Moines, who had served as the head of the company since the Goodwin family acquired the firm in 1943.

Mr. Goodwin retired from active participation in the company affairs in June of 1955 in order to devote more time to his other interests. He has been actively identified with clay manufacturing in Iowa for more than 50 years and is recognized as one of the nation's pioneer clay industry leaders.

Mr. Frisk has been associated with the company for the past 28 years, first in an engineering capacity in 1927 after serving on the staff of the architectural engineering department at Iowa State College, of which he is a graduate. He has been company architectural engineer, Twin City branch office manager, sales manager, and has been general manager of the Mason City plants since 1948. He was elected vice-president in 1951, which position he has held up to this time.



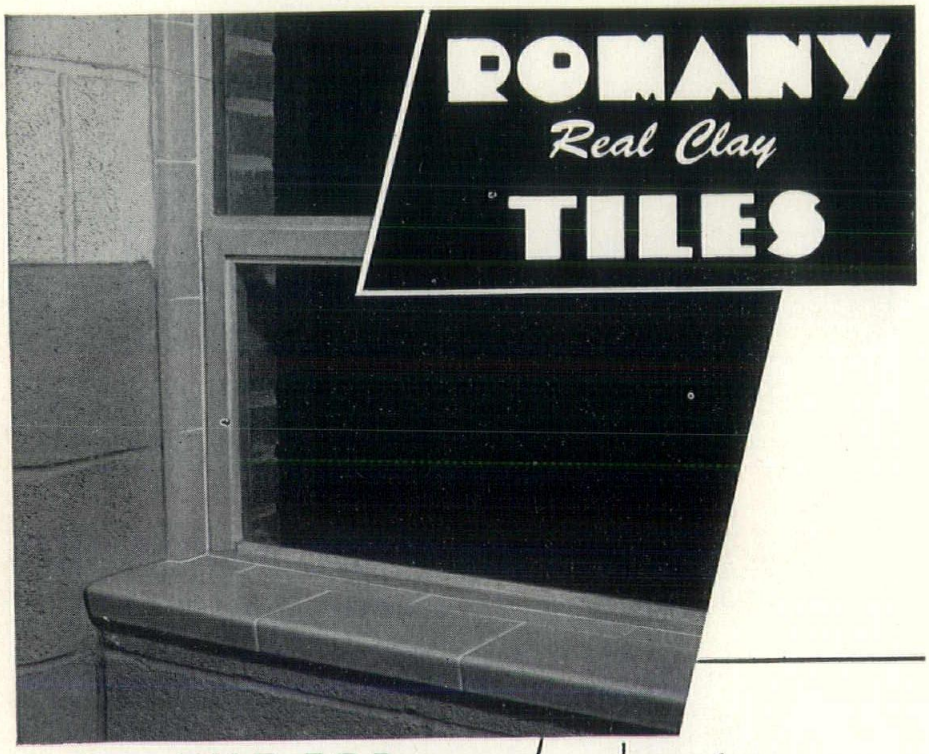
Messrs. Frisk and Koplen
Messrs. Pearson and Haverkamp

Mr. Frisk will also direct operation of Ottumwa Brick and Tile Company, Oskaloosa Clay Products Company, Redfield Brick and Tile Company, and the Des Moines Clay Company, Des Moines. He is a past president of Region 6 of the Structural Clay Products Institute and is currently serving on the board of directors of the National Structural Clay Products Institute and Structural Clay Products Research Foundation.

Other officers elected were R. K. Goodwin, vice-president, W. J. Goodwin, Jr., secretary-treasurer, V. D. Coyle, assistant vice-president, and Miss D. L. Wiltse, assistant treasurer.

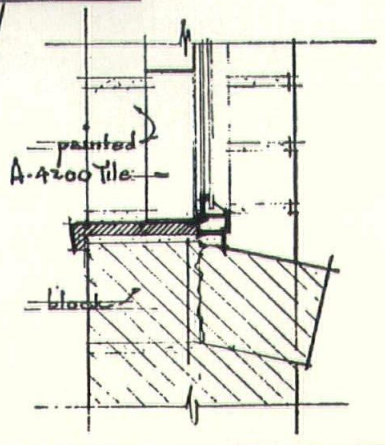
C. H. Koplen has been appointed general manager of the Mason City plants to succeed Mr. Frisk. Mr. Koplen, who has had more than 18 years with the firm, was promoted to his new position from the post of sales manager, which he assumed on coming to Mason City in 1947 from Minneapolis where he had been in charge of the Twin City office.

C. R. "Russ" Pearson, who has served as assistant sales manager since 1947, has been named to the sales manager's post to succeed Mr. Koplen. He joined the firm as sales



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engineer in the Mason City office in 1937 immediately following graduation from the University of Minnesota as a civil engineer and later serving as sales engineer in western and eastern Iowa territories.

G. E. Haverkamp, who has been assistant sales manager in charge of contract work since going to Mason City in 1953 from Minneapolis, where he headed the firm's Twin City office, has been named assistant sales manager in charge of dealer business as well as contract work, and will now devote full time to sales activities of the Mason City office.

CHAMBERLIN MOVES TO NEW QUARTERS

March 1, 1956, the Chamberlin Company of America will move to new and larger quarters at 4424 Excelsior Boulevard in St. Louis Park, it has been announced. W. C.



Mr. Hamilton

Hamilton is branch manager in Minneapolis.

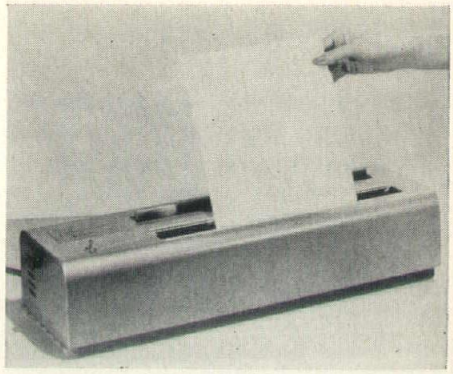
The Chamberlin Company manufactures and installs a complete line of metal weathership, aluminum combination windows for all types of residence, school, church and institution windows, alumnium combination doors, insect screens, caulking, fiber-glass awnings for residence and commercial work, patio covers and psycho-security screens.

Ken Walters has become associated with the firm as estimator, the announcement also said.

The Minneapolis branch is one of 32 factory branches in principal cities of the United States and it services Minnesota, North Dakota, South Dakota, Montana and Wyoming.

DRI-STAT PHOTOCOPYERS HAVE AUTOMATIC PAPER FEED

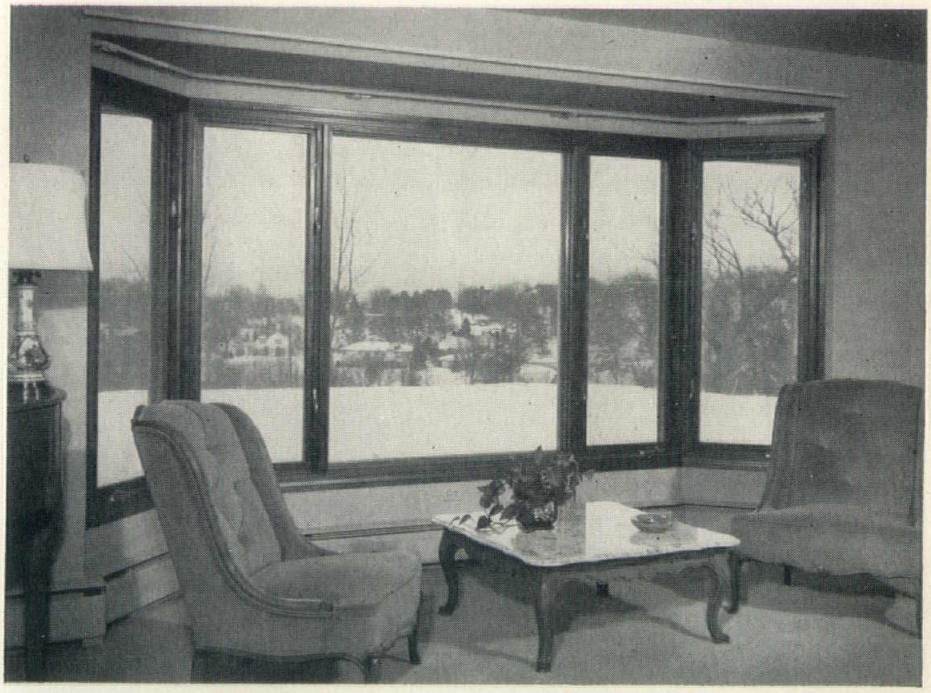
The first transfer-process photocopy machines ever built with automatic paper feed have been developed by Peerless Photo Products, Inc., Shoreham, L. I., New York. The new DRI-Stat machines have an additional internal mechanism which feeds the negative and positive sheets into the processing section by mechanical drive. This automatically insures that the two sheets travel through the processing



solution at the correct rate of speed for thorough wetting, complete development and uniform transfer of

Perfectly at home in traditional surroundings . . .

the Rydell Casement Window



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Architects:
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Two brand new developments for 1956:

- **Double Glazing** — Vinyl-sealed aluminum storm panel—removes from inside
- **Roll Screens** — The famous Watson roll screen—the finest roll screen made—now available as alternate equipment.

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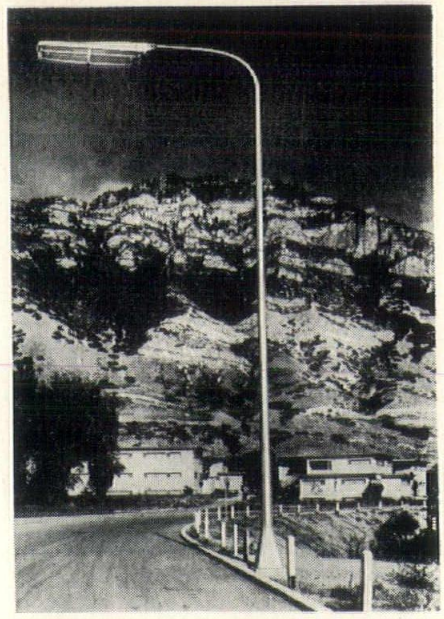
the image and emerge in perfect registration. Uneven quality of the finished positive copy is eliminated, thus reducing the paper waste due to imperfect copies which often result from incorrect procedure in manual feeding.

With automatic paper feed, operator fatigue is reduced and the number of copies that can be made in a given length of time is greatly increased. The new automatic paper feed feature is offered by Peerless on both the combination printer-and-processor and the separate processing unit.

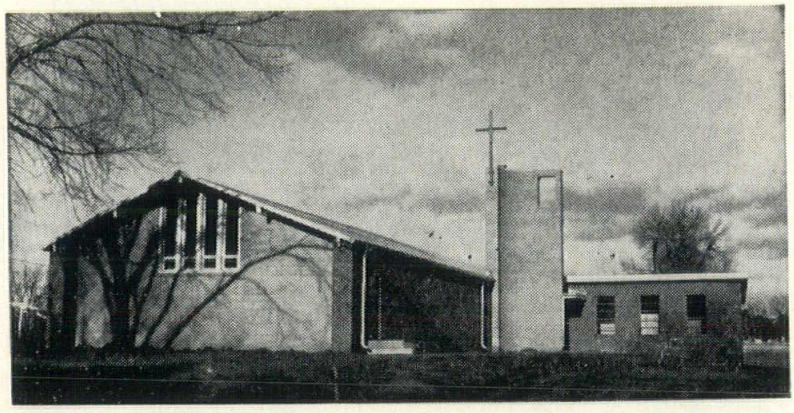
Also shown for the first time at the Business Show were redesigned DRI-STAT separate processing unit and the new dry-powder developer.

NEW LIGHTING STANDARD FOR FLUORESCENT LUMINAIRE

Newest addition to the Millerbernd line is the fluorescent "Elite" standard shown here. This standard is designed especially to accommodate the new slip-fitter type of fluorescent luminaire.

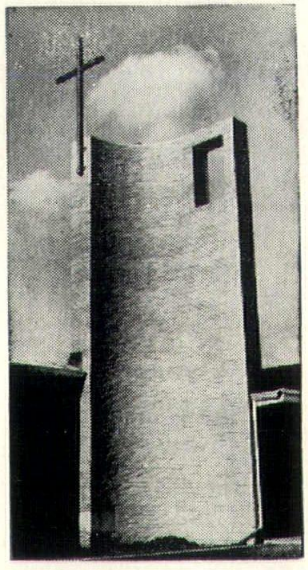


Mounted at a five-degree angle, the luminaire extends 24 inches onto a 2-inch pipe extension of the five-foot davit-type mast arm. The simplified design utilizes high-strength steel throughout and is available in all popular mounting heights. The company is offering illustrated data on its complete line of standards, obtained by writing Millerbernd Manufacturing Co., Winsted, Minnesota.



First Christian Church, Hampton, Iowa
Architects: Wetherell & Harrison, Des Moines
Contractor: Dewey Gilbert
Photo: John L. McQuatters, Iowa Falls

For Greater Beauty And Versatility The Trend Is To Clay Masonry



The effects achieved by clay masonry construction cannot be matched.

Structural Clay Products Institute

Region 6 **Ames, Iowa**



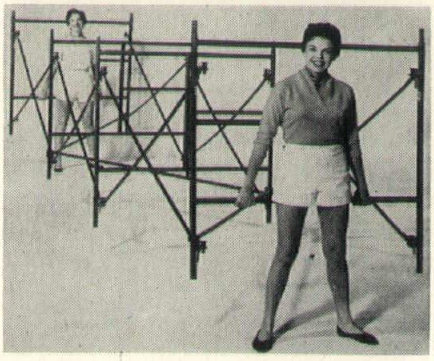
MOISTURE ELIMINATION DISCUSSED

The practical solution to the problem of eliminating destructive moisture in all types of construction is fully explained in the brochure, "Sealtight Products For Better Construction." This brochure contains complete product information, installation information, installation drawings and architectural specifica-

tions and is free from W. R. Meadows, Inc., 7 Kimball St., Elgin, Ill.

NEW, LIGHTWEIGHT WACO SCAFFOLDING CARRIES UP TO 40 TIMES OWN WEIGHT

These two girls, each weighing about 100 lbs., are carrying 21 feet of scaffolding capable of supporting a 4200-pound load. The new scaffolding, manufactured by Waco Manufacturing Company, Minneapolis, Minn., national manufacturers



or heavy duty scaffolding, steel shores, bleachers and concrete forms, is rated at 50 pounds a square foot, according to H. P. Albrecht, company president.

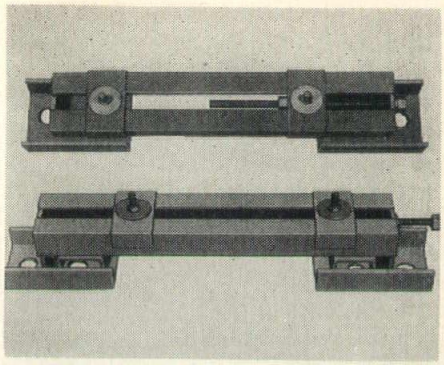
The scaffold frames, 4 feet high and 4 feet wide, feature the Speedlock method of attaching braces and built-in ladders. Braces are the tubular, pivoted type, Mr. Albrecht said, and a section of scaffold 4 feet high, 4 feet wide, and 7 feet long consists of only four parts. Both frames and braces are made of high carbon steel tubing. A complete line of accessories is available and rolling towers can easily be made by the addition of casters offered by Waco.

Advantages of the new Waco equipment, other than its light weight and heavy load capacity, are low cost, easier storage and increased mobility. For further information write Waco Manufacturing Company, 3555 Wooddale Avenue, Minneapolis 26, Minn.

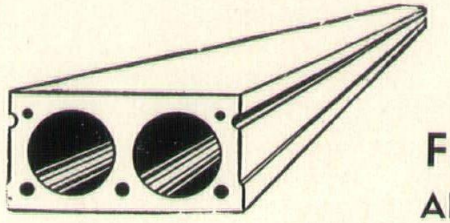
MOTOR ISOLATION BASE WITH BUILT-IN SLIDE ADJUSTMENT

Improvement in vibration and noise isolation bases has been developed by The Korfund Company, Inc., in its Duplex Slide-Rail Motor Base, a "high efficiency, vibration-and-noise-isolating base featuring an exclusive slide mechanism that provides speedy belt tensioning, simple installation and versatility of application."

This base was developed by Korfund to fill a need for an inexpensive and better method of belt tensioning than is provided by the conventional system of using an isolation base plus a separate slide-base or slide-rails. That method necessitates separate purchasing of isolation bases and slide-bases, extra

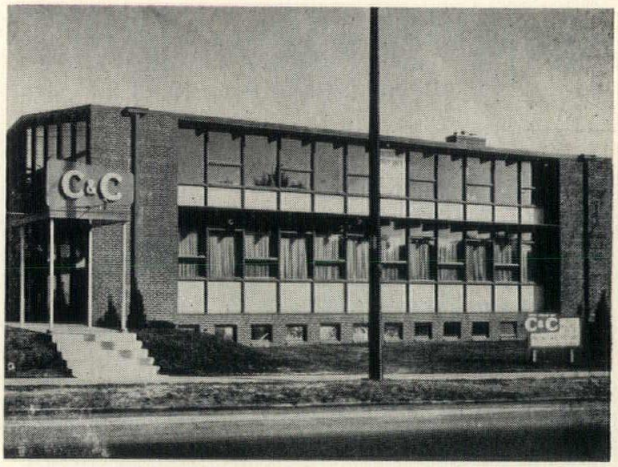


handling, installation and shipping expenses and extra cost of the slide device.



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The Korfund Slide-Rail Isolation Base eliminates these drawbacks and provides additional exclusive advantages. The patented design of twin angle-iron construction assures utmost structural rigidity and, together with the built-in slide rail feature, permits full adjustability of the motor for rapid equipment installation. This design also permits the slide mechanism to be located within the base, rather than on top of it, so there is no addition to the height of the unit or any protruding, hazardous parts.

Full adjustability and the use of individual rails permit the customer to use the same isolation base with a broad range of motor sizes, eliminating scrapping or costly alteration of existing bases when job conditions are changed. Complete information can be had from the Korfund Company, Inc., 48-085 32nd Place, Long Island City 1, New York.

This Year
Plan to Go to the
State Convention!

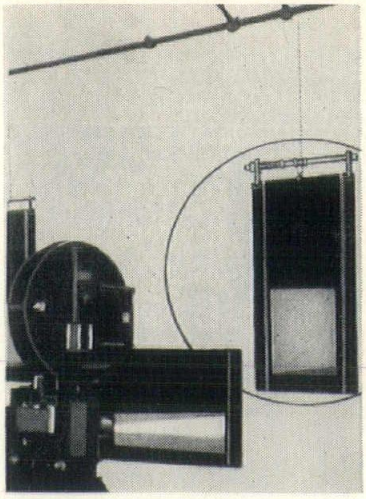
NEW FOLDER DETAILS ARCHITECTURAL PORCELAIN FOR SHOPPING CENTERS

Examples of applications and suggested uses for architectural porcelain in Shopping Centers are presented in a new folder, the latest in a series, by Davidson Enamel Products, Inc., whose Minneapolis representative is Joel F. Jackson. Information of interest to architects, designers, contractors and owners includes detail drawings and complete line specifications. Copies can be obtained by requesting the "Shopping Centers" folder from Davidson Enamel Products, Inc., 1116 E. Kibby Street, Lima, Ohio.

FIRE DOOR CLOSES EASILY WITH NEW DEVICE

A new torsion counter balancer has been designed and placed into production by J. E. MacNellis of The Best Devices Co., Inc., 10921 Briggs Road, Cleveland 11, Ohio, to permit quiet, non-jarring closing of projection room door shutters.

The new balancer is available to



fit the makes and sizes of all existing projection room fire door shutters. It consists of a shaft that rotates on bearings formed by two end mounting brackets, a torsion spring and an arbor that winds or unwinds a cable that fastens to the shutter door.

By mounting the shaft parallel on the top of any fire shutter frame, the cable readily winds or unwinds on the arbor as the door is raised or lowered. As the door lowers, the cable unwinds turning the arbor as well as the shaft against the resistance of a torsion spring. Thus, the door closes quietly without jar or shock.

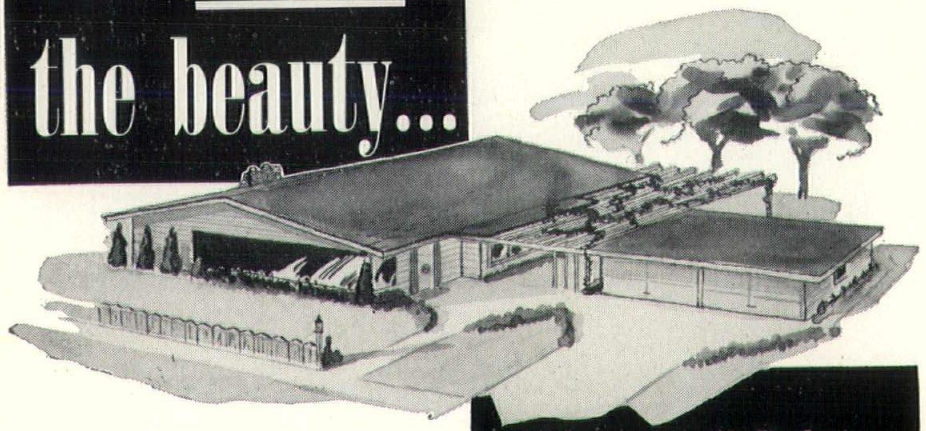
Without the stabilizing effect of Best Counter balancers, fire shutter doors close with the full impact of gravity. This downward force results in shock that vibrates to surrounding wall areas to cause cracks and wall damage. The noise that occurs is annoying to audiences and projection room operators.

The gentle, positive action that Best Counter Balancers provide prevent pinched or maimed fingers as the door closes. Unsightly weights and cables, formerly rigged to each fire shutter door, are no longer necessary when the new balancer is installed. This prevents injury and floor damage from the accidental falling of these weights. Projection room cleaning and the moving of equipment is made easier, too.

Best Torsion Counter Balancers are easy to install, maintain and adjust to the right tension for smooth, quiet, positive fire shutter door closing.

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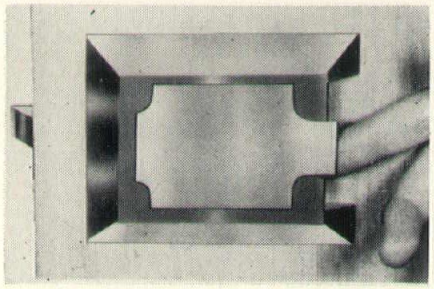
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RYDELL REVEALS NEW PRODUCTS FOR 1956

A. T. Rydell's new 1956 products include the following according to a recent announcement from the company at 2328 N. 2nd St., Minneapolis 11, Minn. The Rydell Pre-hung Door Unit consists of a hollow core flush door fitted, beveled and hung in the frame, with all hardware installed. An exclusive feature of the unit is the use of the new Soss Lev-R Latch as standard



equipment. This latch is an entirely new concept in door hardware. Instead of doorknobs, this unit has a modern, flush plate which opens the door with a flick of a finger. This revolutionary design allows a minimum extension from the face of the door, eliminating the need for door bumpers and harmonizing beautifully with today's modern, flush surfaces.

Another exclusive feature of the Rydell Pre-hung Door Unit is the design of the frame. The door is set in so that neither the hinges nor the latch protrudes beyond the edge of the frame, a real advantage in handling and storing these units and a real contribution toward appearance. The standard unit for plaster walls can be quickly converted to use with sheetrock. The doors are of fine quality construction and feature hardwood edges which match the face veneers.

The units are available in ash or oak. Dull bronze hardware is standard; other finishes are available. The unit is competitively priced, and, in fact, offers considerable savings over conventional on-the-job methods of door installation. Elimination of door hanging equipment and inventory of hardware are important advantages. The unit can be easily installed without special tools or skills, often an important consideration. Speed of installation is one of its most valuable aspects; an entire job can often be installed in less than half a day.

The unit is sold through lumber yards and building material dealers, in addition to Rydell's own retail organization.

Second offering by Rydell is the well-known Versa-Lite window system with double glazing as an alternate to sealed double glazing, which reduces the total cost of the units by about 30 per cent. An aluminum-framed storm panel is installed from the exterior and is secured by self-retained fasteners. No tools are required to remove the storm panel for cleaning. Double strength glass is used in the large fixed glass areas and single strength on the ventilators, in both the sash and storm panel. The exclusive all-wood interior appearance of the Versa-Lite is not disturbed by the double glazing system.

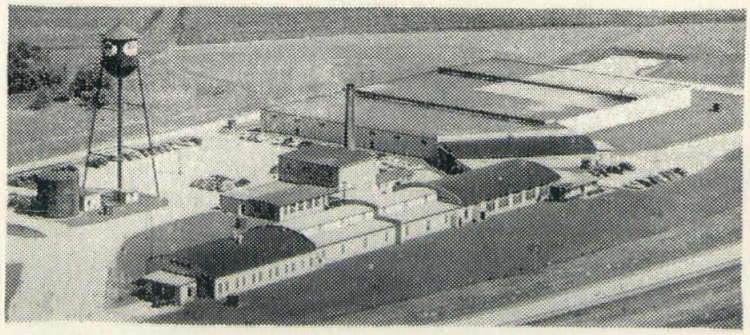
Double glazing is now also available on the Rydell casement window, for all units except the large, fixed glass areas. An aluminum-framed storm panel is installed from the inside for ease of cleaning and maintenance. A vinyl weatherstrip is an integral part of the storm panel and seals off the air space between the panes. The exclusive all-wood interior appearance of this casement is not impaired, since the wood screen covers the metal frames of the storm panel.

Third item, now available on Rydell casements, is a roll screen as an alternate to the standard wood screen. Through an exclusive agreement with the Watson Manufacturing Company, for many years manufacturers of the finest roll screens available, these screens are available for any standard Rydell casement. This screen has a continuous screen track which is solidly connected to the roll case. The unit features a seamless tubular roll, ball bearings, bronze end bearings, non-binding coiled music wire spring, automatic catches and bottom fabric cushion strip.

GILDDEN PUTS RESIN COATING ON MARKET

A labor-saving, low-cost solution to an age-old industrial problem, the maintaining and upgrading wood, metal and masonry surfaces

Minn. Mining & Mfg. Co. a Morse's 'One-Coat' User



Pictured is an aerial view of the Minnesota Mining & Manufacturing Co. tape plant at Hutchinson, Minn.—one of more than 20 plants located throughout the world. In addition to "SCOTCH" Brand Tapes, 3M's widely diversified products include abrasives, adhesives, roofing granules, printing accessories, ribbons and chemicals. Miller & Miller, Hutchinson, were general contractors for the plant.

The Minnesota Mining & Mfg. Co. cleaned and sealed the cement floors of its Hutchinson, Minn. plant with Morse's "One-Coat" to eliminate concrete chipping and dusting to provide a non-slippery floor surface. More than just a concrete sealer, hardener and dustproofer, "One-Coat" protects against severe wear, harsh cleansing solutions and corroding chemicals . . . is an ideal neutralizer and primer for paints, tile and waxing . . . restores old blackened floors to original newness. "One-Coat" requires no mixing, no diluting, no multiple applications. Write for complete information.

F. J. MORSE CO., INC. Rossmor Bldg., St. Paul, Minn. CA 4-1995

Member—St. Paul and Minneapolis Builders Exchanges

in plant facilities, has been announced by The Glidden Company with the introduction of its new, 100% solids resin coating, named Glid-Iron.

In addition to having excellent adhesion to wood, metal and concrete, Glid-Iron is highly resistant to chemicals, thus making it ideal as a floor coating in fruit processing plants, canneries, dairies, plating and chemical plants and machine shop areas where the spillage of chemicals and oils is common.

The new coating offers substantial savings with Glid-Iron application cost set at 15 to 19 cents per square foot, compared with other methods that range up to 35 cents per square foot.

Glid-Iron may be applied by spray, brush, roller or squeegee in any mil thickness, 1/16 to 1/2-inch if desired. Application time for a 10x40-foot area is 20 to 30 minutes with an undercoating gun and two to four man hours by other application methods.

Capable of smoothing out and bridging small cracks, the new coating sets to a hard, tough, flexible and scuff resistant finish after curing overnight at normal room temperatures. It possesses "outstanding resistance to shock and impact, showing no adverse effects from the extremely heavy weights and rough abuse caused by materials handling lift trucks and other such mechanized equipment."

Glidden research technicians report Glid-Iron will withstand extreme temperature ranges—from 20 degrees below zero to 212 degrees Fahrenheit. Additionally, the floor coating is skid-proof even when wet with rain or snow, and nails may be driven through the film without its chipping. Glid-Iron may be supplied in any color.

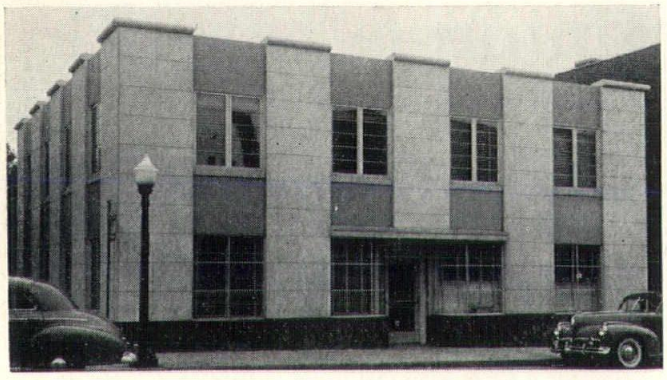
TENNESSEE STOVE ANNOUNCES NEW BUILT-IN GAS RANGES

Tennessee Stove Works, Chattanooga, Tenn., has announced a new line of Modern Maid built-in gas ranges. The new units are available in either stainless steel or a rich combination of non-tarnishing antique copper porcelain accented with wrought iron black.

A choice of three different ovens



is offered, with two or four burner surface units and optional griddle. Modern Maid's new banquet-size built-in oven is one of the largest in the industry and is available with fully automatic clock controls, automatic oven lighter and, as an added feature, a hood over the oven vent to keep walls clean. Ease of installation was a prime consideration in the design of the new Modern Maid built-in units. As a result both the ovens and the surface units are especially easy to install and maintain. Complete catalog information is available by writing Tennessee Stove Works, Chattanooga 1, Tenn.



- *Office building with Artstone green and white facing, located at Redwood Falls, Minn.*
- *Carl B. Straus, Architect*

Our time-tested products are on display at both easily accessible offices. Drop in and look over the flexible Artstone products, suitable for so many building purposes, and manufactured close to your building site.

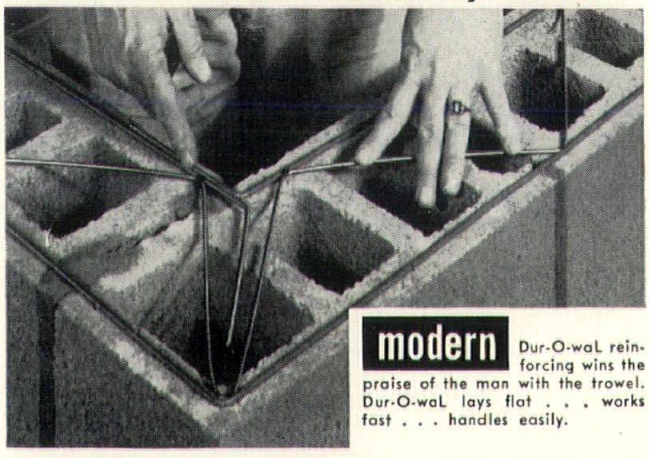
If you are now planning a job, write us for information. Among successful uses of Artstone which can be shown are Facings, Trims, Spandrels, Coping, Sills, Stools, Tracery, Lawn Furniture, and many others.

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U. S. CERAMIC TILE ACQUIRES CRONIN WORKS

So it can use the building and kiln facilities to help meet continued increased demand for its ceramic tiles, the United States Ceramic Tile Company has acquired shares of the Cronin China Company of Minerva, Ohio. The dinnerware lines formerly made by the Cronin firm have been discontinued and facilities will be devoted solely to construction tiles.

John A. Cable of U. S. Ceramic Tile said that conversion of the newly acquired properties to complete production of the ceramic tiles would take until some time this summer as the dinnerware making equipment had to be removed and the tile machinery planned into the building's spaces.

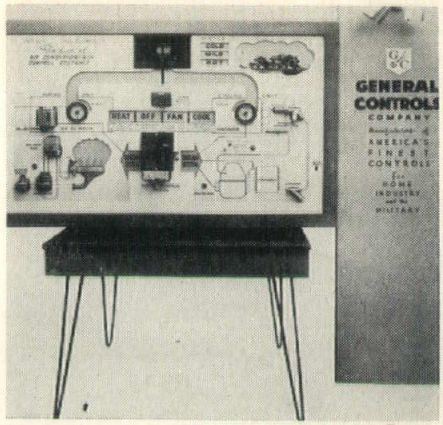
U. S. Ceramic Tile is represented in the Northwest by Rollin B. Child. The firm is one of the country's biggest makers and distributors of this type of building material and increased demand for its products has created a steady growth in its facilities.

GENERAL CONTROLS USES MINIATURE TO DEMONSTRATE NEW THERMOSTAT

To demonstrate a new thermostat that will automatically switch a two-way system from heating to cooling as needed, General Controls Co. constructed a miniature heating-cooling plant, complete in detail, for its exhibit at the National Association of Home Builders Show in Chicago in January.

The new General Controls dual thermostat is recommended for installations where completely automatic summer-winter temperature control is desired. Two dials allow setting of desired heating and cooling temperatures.

The thermostat's thin silhouette case of satin-finished stainless steel provides an ultra-modern exterior and is hermetically sealed against dust, grit, lint and moisture. It has mercury switch contacts, built-in mechanical interlock to prevent cross-setting and large white numerals on black roll type positioned to permit easy finger-tip control without wall smear.

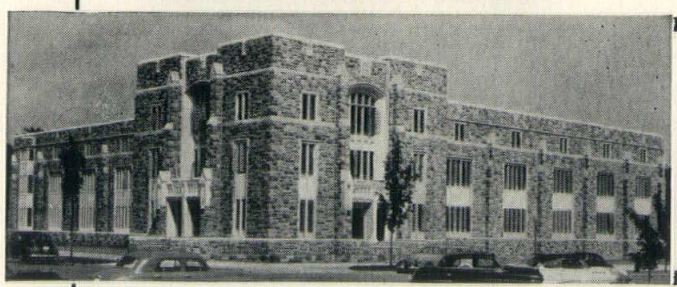


Other new General Controls products that were featured in the show include a new line of water heater controls now available in a wide range of decorator colors and a new clock thermostat known as the tempotherm. It automatically lowers and raises room temperatures to assure comfortable sleeping conditions through the night and warm rooms in the early morning, according to your time settings.

General Controls distributors throughout the U. S. and Canada, as well as the factories in Glendale, Calif., and Skokie, Ill., offer complete information on the new products.

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112,300 sq. ft. of "Smooth Ceilings" are used on the new library of VIRGINIA POLYTECHNIC INSTITUTE

Architect and Engineer
Carneal & Johnston
Richmond, Va.

This beautiful new library on the campus of V.P.I. at Blacksburg, Virginia, would be an asset to any university or college. Its unique design is another example of the diverse applications of "Smooth Ceilings." The full clear height between floor and flat ceiling may be utilized with usually a saving of several inches in each story height. The use of "Smooth Ceilings" reduces forming costs, lowers plastering and decorating costs, and enables the builder to provide better lighting and acoustics. *For more information, write to:*

"SMOOTH CEILINGS" SYSTEM
Walter H. Wheeler, Inventor and Consulting Engineer
802 Metropolitan Life Bldg., Minneapolis 1, Minn.



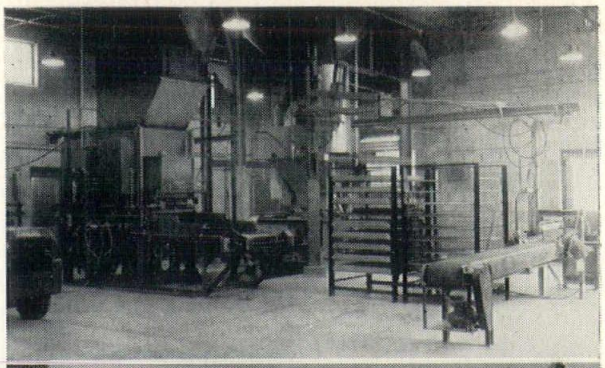
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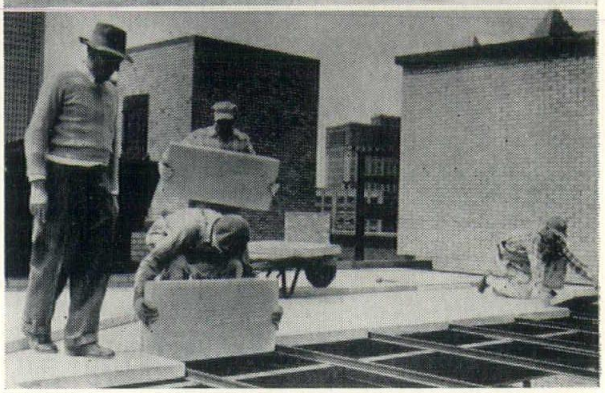
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WESTERN MINERAL OPENS UNIQUE MINNEAPOLIS PLANT





An unusual plant to produce precast vermiculite concrete roof tile has just been opened in Minneapolis by Western Mineral Products Co., lightweight aggregate processors. The only one of its kind in existence, the plant is attracting visitors from over the nation, C. A. Pratt, the firm's vice-president in charge of engineering, said.

The basic difference between this and other roof tile plants is that here the slabs are formed by a machine that vibrates and compacts a relatively dry lightweight concrete mix and forms the tile directly on a steel pallet. Other precast tile plants use a wet mix method in which the concrete is poured into pans and allowed to set up.

Specially designed after three years of experiment, the automatic tile machine also introduces welded wire reinforcing mesh and forms the tiles at the rate of four a minute. A tile is 18 inches wide, 36 inches long and three inches thick.

It can support in excess of 200 pounds per square foot, which provides for a 50-pound snow load with a safety factor of four. Insulation value is equal to the average structural deck with from one to one and one-half inches of insulation added, Mr. Pratt stated. The noise reduction co-efficient of the attractive, smooth under-surface is .50. A tile weighs about 50 pounds.

Dry ingredients for the concrete are fed from silos into an automatic weigh batcher, pre-set to control the exact ingredients for each batch. Water heated to 100 degrees to assure high early strength is metered



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Pictures opposite show the new plant and tiles being installed.

into a reservior which holds enough for each batch. A 30-cubic-foot mixer mixes the concrete for four minutes and discharges it into a skip hoist, which delivers it to the tile machine.

Much time and effort were expended in designing the application of the reinforcing mesh to be certain that it is placed exactly in every tile. The equipment requires a 300-foot-long roll of mesh every 20 minutes.

The formed tile is removed, two at a time, by an air arm off-bearer and is placed on metal racks that hold 20 tile each. The filled racks are then taken to three curing kilns by fork-lift truck.

These kilns are also exceptional. Each is equipped to maintain close to 100 per cent relative humidity and temperatures in the range of 150 degrees. The kilns are humidified by live steam and are heated by a blower fan system. Instruments on a control panel permit reading temperature and humidity conditions in the kilns at all times. Each kiln can accommodate 700 tiles.

The tile remains in the kiln until the following day, when it is beveled by machine to provide a V-joint where the tiles butt together on the roof. This assures a neat undersurface appearance where the deck is exposed. The tile is then placed on wood pallets and is taken by fork lift truck to storage, where it cures for three weeks before going out to a job.

Discussing the tile from an architectural standpoint, Mr. Pratt stated that lightweight concrete has long been recognized as having desirable qualities for roof construction, combining insulation, fireproofing and light weight with resistance to moisture disintegration. The only problem has been placing such decks in cold or wet weather. Precast tile has all the desirable qualities of lightweight concrete, is cured under controlled conditions and can be speedily erected in any kind of weather, thus assuring early closing of the building, Mr. Pratt said. It can be installed within a price range of from 50 to 60 cents per square foot, depending on the size of the job and individual job conditions, he added.

Delivered at the job site, the tile is elevated to the roof by conveyor and buggied to the point of placing. A tile can easily be handled by one man. The units are laid on light steel rails spaced 36 inches on center, which are welded across the main purlins. This gives the building added rigidity against wind stresses, which architects and engineers find highly desirable, Mr. Pratt asserted. To secure the tile against any uplift, it is grouted together with a fast setting concrete mix. Built-up roofing can be applied immediately and the tile can be nailed into, cut or sawed with ordinary wood working tools.

The new plant has a rated capacity of about 2,000 tiles per eight-hour day. Typical long span bar joists with exposed tile on steel rails on the roof deck over the 3,000 square foot operating area will serve as a display room for interested architects and engineers, Mr. Pratt said. The building is served by its own railroad trackage accommodating ten cars.

Minnesota (MGI) Granite

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"The Best in Granite from the land of Hiawatha"

489 Superintendents Can't Be Wrong!

Yet, *489 schools in this area selected ***natural slate*** for their new buildings during 1954-1955. Many of them have experimented with green chalkboards, and now have switched to modern ***natural*** slate.

Why? Scrubbable, high-visibility slate prevents squinting today, prevents possible eye-strain tomorrow. The only ***permanent*** chalkboard, natural slate will still be in use 50 to 100 years from now.

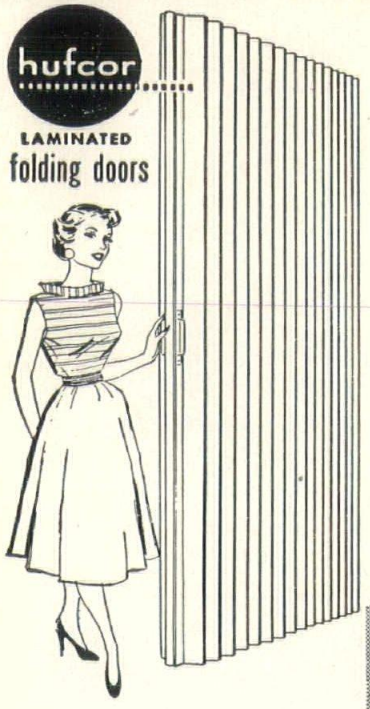
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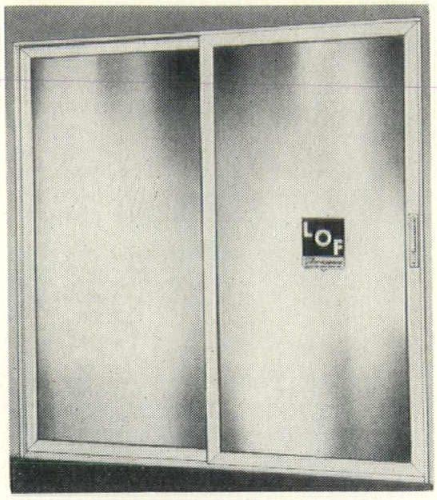


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The structural design of the plant was handled by Milan A. Johnston of Johnston & Sahlman, Minneapolis structural engineers. Construction Associates handled general construction, and the W. S. Nott Co. furnished the steel bins, weigh batcher, and conveying equipment.



CAPRI INTRODUCES CONTINENTAL DOORS

The new Continental Series of the Capri Sliding Glass Door line manufactured by T. V. Walker & Son, Inc., Burbank, Calif., recently made its debut.

These units form the first major advancement in research and design of this type of unit since its inception. Basis for design and features stem from extensive research throughout the distribution, architect, builder and consumer fields. The Continental is an all-anodized aluminum sliding glass door unit designed especially for one inch Thermopane insulating glass, with an alternate version for quarter inch plate glass. This research has resulted in a completely new type of sliding glass door unit—one that is suitable for installation in any area, regardless of the severity of cold or heat.

A precision unit, with two sets of adjustable, double, steel wheels, it is structurally designed to "carry the freight" of one-inch Thermopane insulating glass. It is also a unit of beauty, highest quality and utility for commercial and residential uses with plate glass installed. The Continental brings *full captive* channel glazing eliminating screw-on glazing bead, as well as reducing assembly and glazing time. Its narrow profile of four inches, including jambs and screen doors, and its complete curved sill with nearly flush replaceable stainless steel track will be greatly appreciated in the commercial and institutional fields, as well as any type of residential installation.

Revolutionary design in weatherproofing and engineering of the vertical meeting stiles eliminates primary cause of freezing in closed position, giving greater safety, insulation and continuous year-round operation in all weather. Consideration for areas with insect problems is another factor in the design of the Continental. Screen doors have been taken as integral part of the overall design to virtually eliminate all insect invasion points.

The Continental series for Thermopane and plate are available in standard and custom sizes for each type glazing through flat glass dealers. For complete information and architectural details write T. V. Walker & Son, Inc., P.O. Box 547, Burbank, California.

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PLAN HOLD HAS NEW WALL RACK

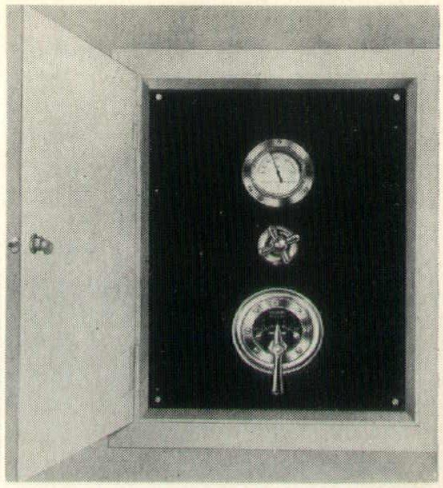
Plan Hold Division of Air Comfort Company, South Gate, Cal., manufacturers of the popular friction-type Plan Hold, has developed and is now in production on a unique wall rack. Brackets, pivoted within a wall plate, support Plan Holds which are equipped with special slide-over clips. Brackets swing back and forth so reference is readily available to either side of plans.

This construction allows for easy filing of skirted plans. A rolling steel stand with built-in wall plate is also available, providing a more convenient support for the brackets and Plan Holds.

COMPLETE, COMPACT SHOWER CONTROL UNIT INTRODUCED BY LEONARD

A completely self-contained water temperature control unit for school showers has been added to the Leonard Valve Company's extensive line.

This Leonard G. S. Control Unit is preassembled, factory tested and



ready for installation on the job. All necessary fittings — unions, checks, strainers, volume control, shutoffs, easy-to-read three-color dial thermometer and thermostatic water mixing valve—are assembled in a locked, vandal-proof steel cabinet with a removable black Formica panel board.

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Daraweld has "built-in" water resistance. Cement pastes or mortars, plain or pigmented, containing proper Daraweld-cement ratio can readily be applied to masonry surfaces to make them water repellent even when subjected to hydrostatic *heads* of several feet.

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three couplings and all parts can be easily replaced on the job without disturbing pipe connections. No factory repairs are ever necessary.

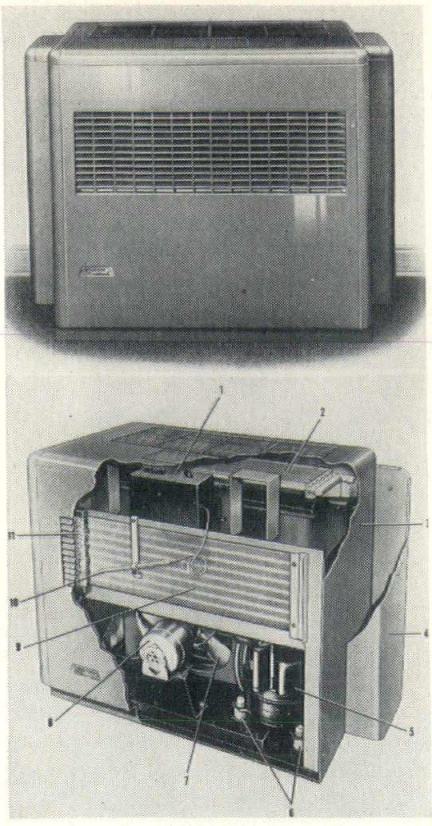
The G. S. Unit is available in six standard sizes for group or gang control, in smart modern cabinets furnished in colors to match the shower room. Other models are available in compact units of three or four controls for progressive or zone showers.

For more information ask for the bulletin No. 27, Leonard Valve Company, 1360 Elmwood Avenue, Cranston 7, R. I.

NEW COMBINATION HEATING-COOLING UNIT FOR COMMERCIAL INSTALLATIONS

Mueller Climatrol, Milwaukee manufacturers of heating and air conditioning equipment, have just announced a new combination heating and cooling unit for installation in multi-unit buildings. The compact room-type air condition has a self-contained, air-cooled cooling unit with a built-in heating coil which operates off the central steam or hot water system. Because the unit is installed through the wall, it is known as the Type 920 *Recessed* Air Conditioner.

Back in 1953 the company introduced the first version of this unique unit but it was applicable for cooling only. Known then as the Type



910 Recessed Summer Conditioner, thousands have been installed in homes, apartments and other commercial applications and have proved efficient in field operations. The combination version, employing the heating coil, is much the same in design as the original model except for improvements that provide for more efficiency.

"The new Mueller Climatrol recessed units will usually replace the radiators in existing buildings," the company said. "They are 30 inches high, 32½ inches wide and protrude into the room only 15½ inches. An opening is cut through the exterior wall for installing the flush-mounted outside louver frame to the outside wall. This single access to the outside serves the dual purpose of supplying fresh air for air cooling at the condenser and for discharging the warmed, humid air leaving the condenser."

Company officials point out a number of advantages with the new unit: (1) It provides individual thermostatic control of the heating and cooling in every room, since the unit contains a built-in dual-purpose thermostat. (2) The Type 920 recessed conditioner can be installed without disturbing tenants. Installation is fast, low cost. Only one tenant is disturbed at a time, and only for a short period. (3) The unit provides four important comfort functions: selector switch permits adjustments for cooling and dehumidifying, forced air heating, ventilation with outside air, and exhausting stale room air. (4) Since the air conditioning unit is air cooled and self-contained, it requires no water, piping or drain. (5) The steam coil is located in such a manner that the refrigeration cycle may be installed or removed without disturbing the heating coil or piping. (6) The small exterior louver opening is attractive, flush with the outside of the building and rust proof. (7) The unit installs quickly, easily—no major changes to the steam system or piping. (8) Tests show that the unit costs less to install, operate and maintain. Ther-

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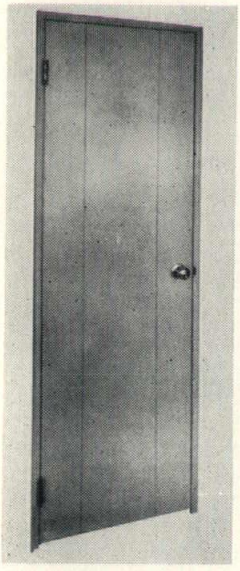
Gopher Stone & Brick Co., Inc.

150 Irving Ave. No. Minneapolis, Minn.

• FEderal 3-6209 •

mostatic control of the heating insures major savings on steam costs, as opposed to zone control systems. (9) The unit provides individual control of air distribution and velocity since outlet louvers are adjustable.

Controls on the new Mueller Climatrol unit are concealed but easily accessible. They include a push button selector switch and integral heating and cooling thermostat. The unit employs twin blowers for moving the air off of the heating and cooling coils, insuring sufficient air velocity and coverage. The outer casing is finished in a prime coat so that it can be repainted to match the room decor. Matching chases, to conceal the supply and return pipes and shut-off valve, are supplied as standard equipment.



NEW LINE OF RESIDENCE STEEL DOORS ANNOUNCED

The addition of a complete line of steel doors and frames for residential and commercial use has been announced by the Steelcraft Manufacturing Co., 9017 Blue Ash Road, Rossmoyne, Ohio.

The full line includes 1⅜" doors for residences, housing projects and apartments, and 1¾" doors for hotels, motels, office buildings and institutions. Glass panels, vision lites and louvers as well as a baked-on prime finish or a choice of colors is available. In addition, it is believed that this is the only residential steel door line on the market offered with a wood grain finish, the announcement said.

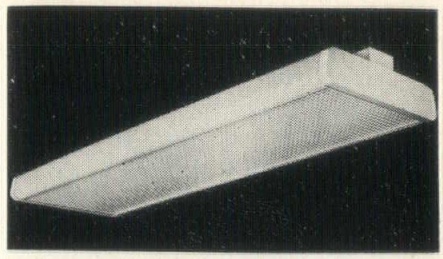
Because these sound-deadened, fire-resistant doors and frames are mass produced to precision tolerances, their installed cost compares favorably with that of wood. Because they are made of stretcher level furniture grade steel, reinforced with stiffeners and completely welded, they cannot warp, swell, shrink or splinter.

Available with or without hardware, this line complements the heavy duty commercial industrial line of doors and frames in which Steelcraft specializes.

NEW ADDITION TO SKYLOUVER LINE

Electro Silv-A-King Corporation, Chicago, Ill., and Reading, Pa., manufacturers and designers of commercial and industrial fluorescent and incandescent lighting equipment have augmented their line with a new addition to the Skylouver series.

A thinner, lighter feeling has been achieved by a newly designed ½" "Poly-cube" polystyrene louver basket, providing 45° x 45° shielding. The "Poly-cube" louver has just been developed by Electro Silv-A-King and will be featured in many



of its fluorescent lighting fixtures. The appearance of a one-piece louver basket bottom is achieved in each four-foot Skylouver, as there is no visible supporting bar for the louver.

The present Skylouver, so well accepted by architects, engineers, contractors and users, is still available. This features a 1" x 1" x 1½" Polystyrene louver, providing 45° x 35° shielding.

This additional Skylouver series is designed for either pendent or flush mounting and can be continuous row-mounted without any additional parts.

This new Skylouver series has the following features for easy installation and maintenance. The louver basket is hinged and easily removable from either side. All that is required for cleaning is the simple procedure of cleansing the entire basket in a detergent bath and allowing to air dry. Lampholders are so placed that lamps are inserted from the top so that vibrations cannot cause lamps to drop out of lampholders. This is a safety feature, particularly interesting to schools and also provides a means of easy maintenance in pendent mounted fixtures. All units have a one-piece die-formed and welded 20-gauge steel channel.

Further information can be had from the company at 1535 S. Paulina Street, Chicago 8, Illinois.

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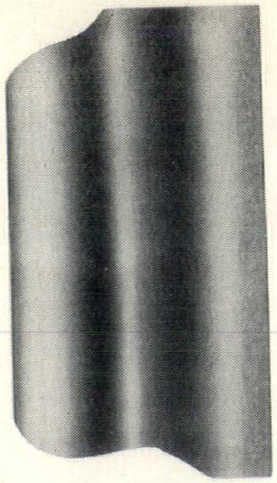
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SUPER DURABILITY, BEAUTY FEATURE VICRTEX DADO-WALL

Knowing that architects, decorators and builders have long looked for an attractive, smooth-surfaced utility fabric with exceptional durability and resistance to wear-and-tear for use in hospitals, schools and institutions, L. E. Carpenter & Co., Inc., makers of Vicrtex fabrics, have produced Dado-Wall.

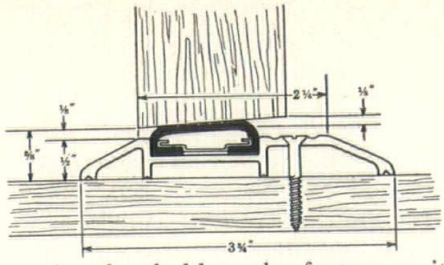
"Having pioneered in embossed vinyls," the company said, "Carpenter now has developed this fabric which embodies all the durable, wear-and-scuff resisting qualities for which Vicrtex has long been famous. Furthermore, Dado-Wall is flame-resistant, won't yellow or discolor, is abrasive-resistant and won't shrink at the seams.

"Because of the V.E.F. fusing process (vinyl electronically fused—not a laminated coating) Dado-Wall will never chip, crack or peel.

Details, samples and prices can be obtained from L. E. Carpenter & Co., Inc., Empire State Building, New York 1.

NEW VINYL THRESHOLD INTRODUCED BY M-D!

Newest addition to the line of aluminum thresholds made by Macklanburg-Duncan Co., is the AP 3¾" with vinyl insert. Available in sturdy extruded Alacrome, the new M-D threshold features a tough vinyl insert that can be very easily replaced when necessary. On most thresholds of this type currently available it is virtually impossible to replace the vinyl without returning the



entire threshold to the factory so it can be installed by machine. However, in the new M-D unit, it is now possible for anyone to replace the vinyl insert right on the job!

The threshold is 3¾" wide overall, ½" high to top of threshold with overall height of ¾" including vinyl, and 2¼" wide across top. Illustration shows a cross-sectional view of a typical installation. Note ⅛" bevel at bottom of door made in the direction of closing. This bevelled bottom depresses the vinyl insert enough to make a snug, positive contact that keeps out drafts, dust, snow, rain and makes air conditioning and heating more effective.

Further information may be obtained by writing directly to Macklanburg-Duncan Co., Box 1197, Oklahoma City 1, Oklahoma.

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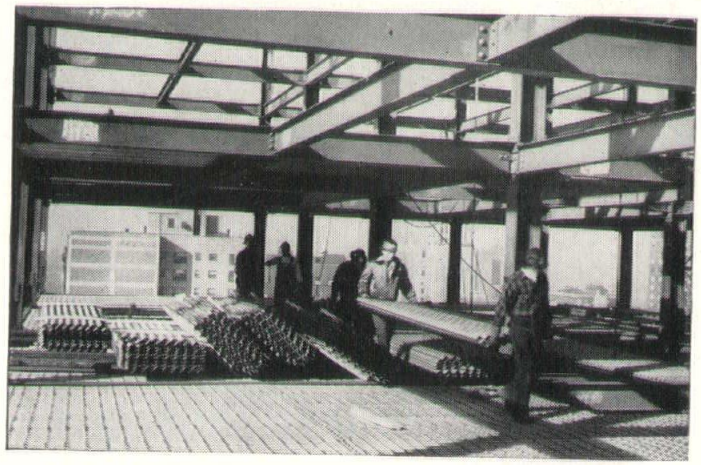
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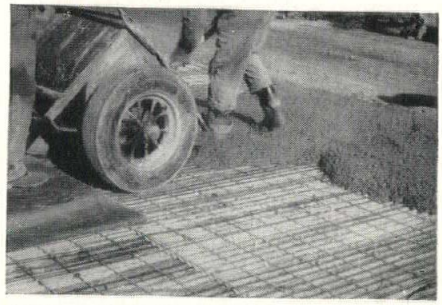


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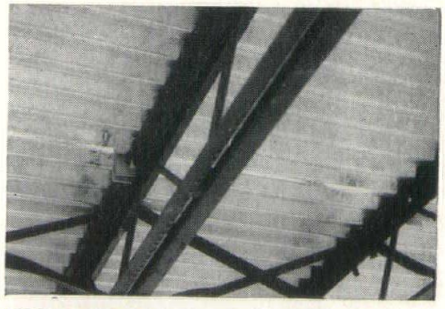
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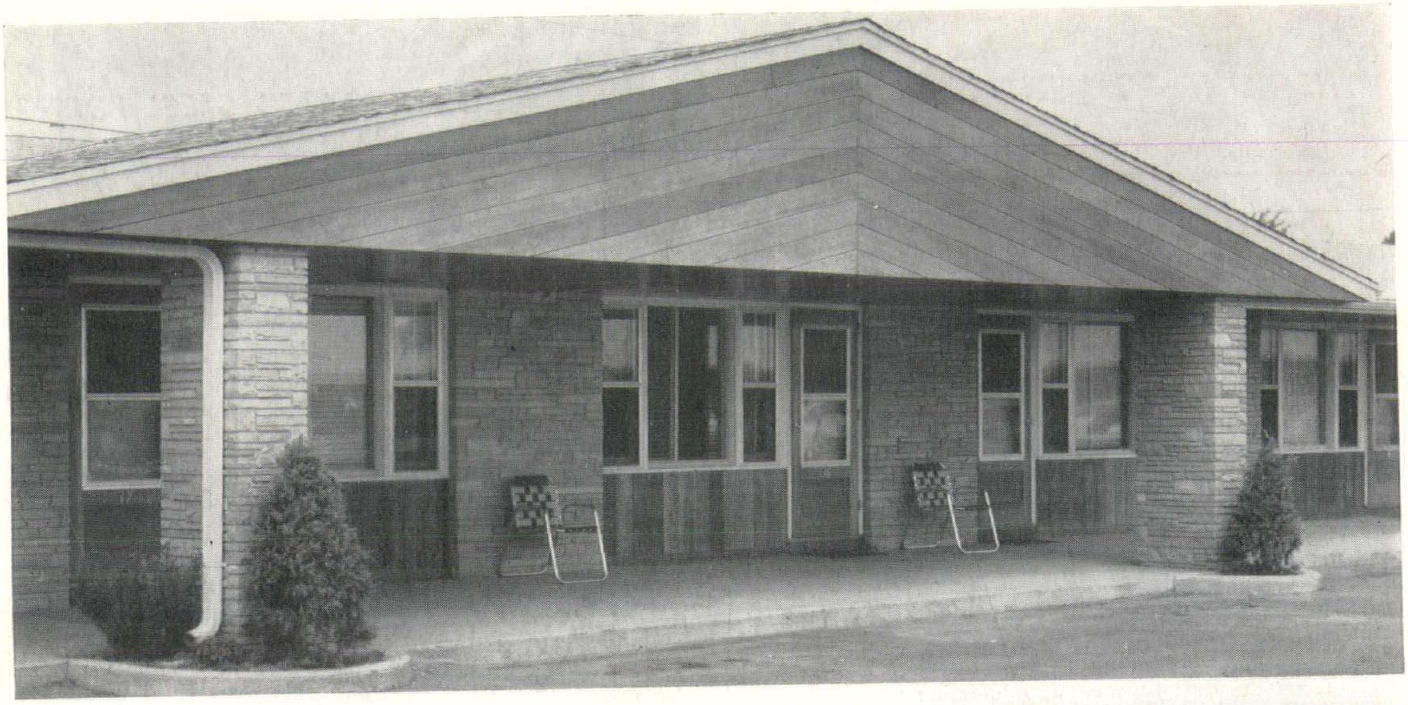
Phone: FE 3-4291—Ask for Jim Coulter or Jerry Halseth

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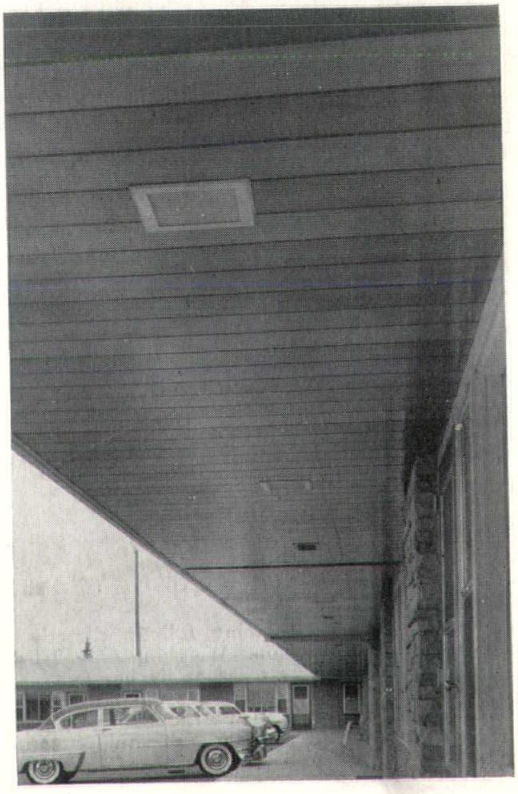
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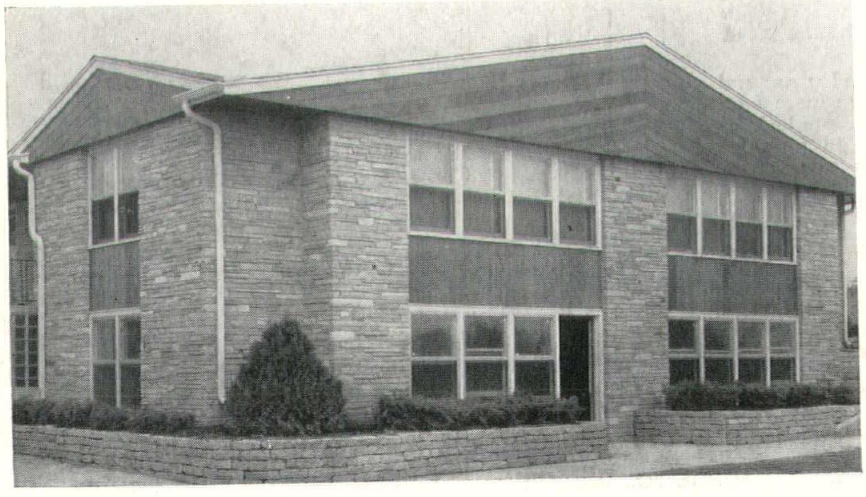


BILTMORE MOTEL, Minneapolis

PALCO REDWOOD 1x8 and 1x10 clear heart vertical grain V-joint was used extensively, combined with stone, to create an outstanding architectural effect. 1x10 V-joint was applied to the gable ends parallel to the roof line.

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